

MAY 1955

**PRINTING**

**EQUIPMENT**

**ENGINEER**



**AN INDUSTRY-WIDE  
TECHNICAL PUBLICATION**

**PLEASE ROUTE THIS COPY TO**

Manager	Pressroom Foreman
Production Mgr.	Bindery Foreman
Plant Supt.	Mailing Foreman
Platemaking Foreman	Maintenance Supt.
Composing Foreman	Purchasing Agt.
For filing, please return to	

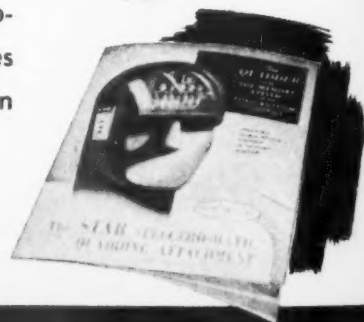
# The Star Selectro-Matic Quadder

# INSTALLED IN 8 HOURS

When today's high composing-room costs are considered, the time required for a quadder installation is an important factor. Only the STAR Selectro-Matic Quadder can be applied during a single shift. This is one other way in which many production dollars are saved when you choose the Selectro-Matic Quadder.

In addition to this unequalled installation service, the STAR Selectro-Matic Quadder has many other outstanding and exclusive features designed to increase production on all types of white space composition.

A new 8-page brochure will bring you complete information about the many new time-saving features . . . information about the famous "Memory Circuit" . . . information about how the Selectro-Matic Quadder automatically quads short lines . . . how it adapts to Teletypesetter operation . . . and much more. Write for it today!



Precision  
TRADE ★ MARK  
Parts

BRANCH 1327 BROADWAY, KANSAS CITY, MO  
AGENCIES CHICAGO · MINNEAPOLIS  
LOS ANGELES · DENVER · BOSTON  
CANADA SEARS LTD. and Agents Overseas

## LINOTYPE PARTS

*Company, Inc.*

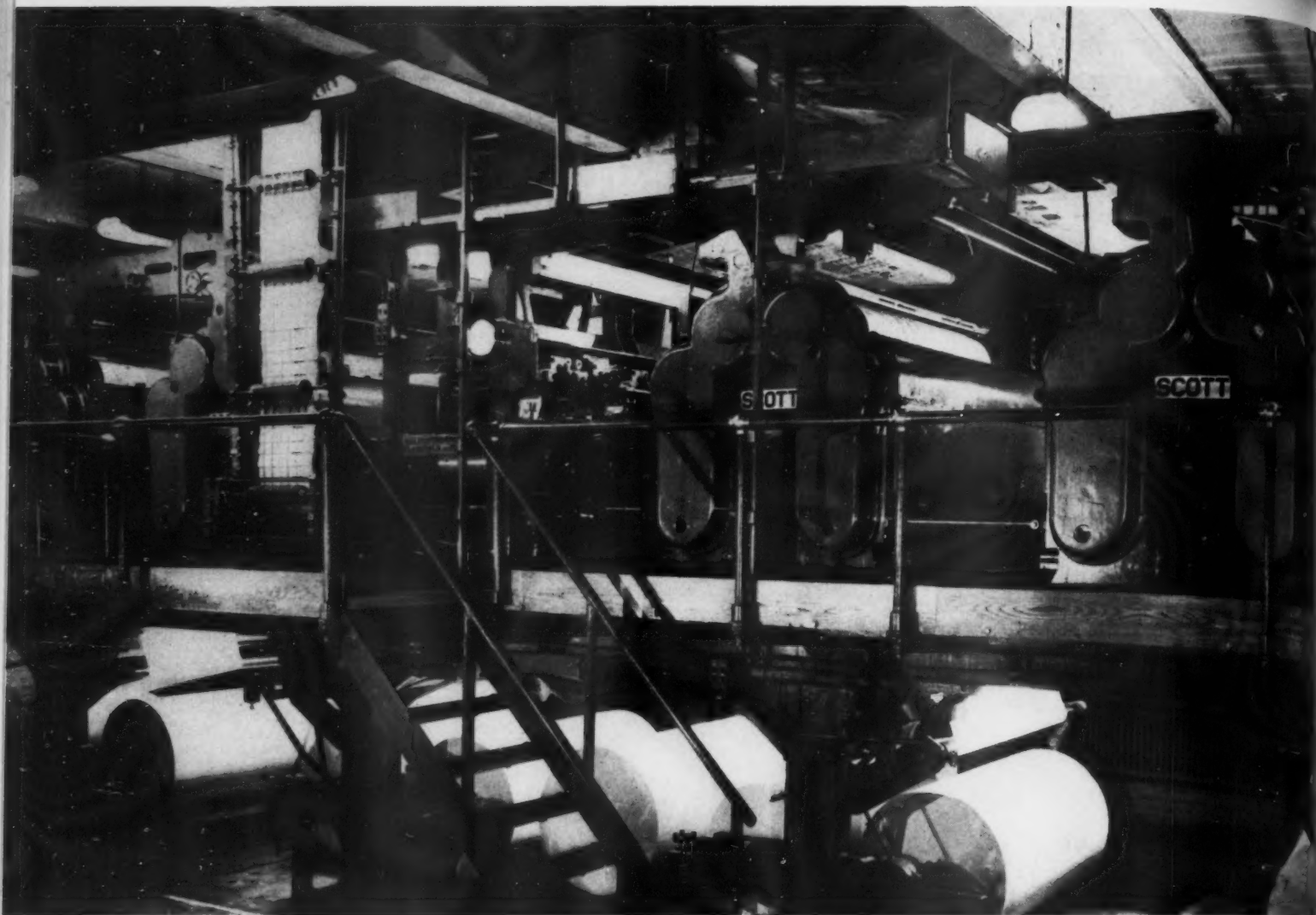
SOUTH HACKENSACK, N. J.

**soon** ♦♦♦

Sta-Hi's new stereotype mat color registering machinery will be in operation in several progressive newspapers and in a leading commercial color printing plant! These orders are being filled for early delivery . . . . .

**STA-HI**  
CORPORATION  
WHITTIER  
CALIFORNIA





Four-Unit, Mezzanine-Type, Scott Extra High-Speed Presses  
at the Stamford Advocate, Stamford, Connecticut.

## SCOTT EXTRA HIGH-SPEED PRESSES SAVE ON OPERATING COSTS!

**W**hen you get a combination of lowest operating costs, top flight engineering, materials and manufacture in a press designed for speed (up to 1000 papers a minute), that is the perfect combination. SCOTT makes these machines in highly standardized, refined and proved designs which allow perfect interchange of parts between presses.

Years ahead engineering gives SCOTT presses trouble-free, economical, continuous performance. A lubrication system designed, as part of the press, for high-speed operation; dynamically balanced solid rotor cylinders and drive shafts; these and many other features make SCOTT the right choice for your pressroom.

*Writing about SCOTT presses, Kingsley Gillespie, Publisher of the Stamford Advocate said, "... most in performance per dollar expended." There's another way to say it. "You get better results with SCOTT." Write for detailed information.*

Buy with **CONFIDENCE** - - - Buy

**SCOTT**

5-55-5A

**WALTER SCOTT & CO. INC.**

PLAINFIELD, NEW JERSEY



*and still another . . . .*

# INDIANAPOLIS STAR AND NEWS

*is now installing—*

**HURLETRON**

AUTOMATIC REGISTER CONTROL

**FOR R.O.P. COLOR**

- ☆ Maintains accurate, automatic register of all colors within a few thousandths of an inch.
- ☆ Register established at low speed is maintained up to highest operating speed.
- ☆ Makes high speed corrections at splices thus reducing off-register waste.
- ☆ Provides pressman with continuous indication of running register and enables him to make adjustments in known increments.

Hurletron Automatic Color Register Controls are in successful operation in leading newspaper plants as well as in the finest color printing plants in the country, both rotogravure and letterpress.

Get the facts for yourself . . . see how this equipment can cut your costs . . . improve printing quality . . . save time . . . avoid waste.

*Ask for our latest booklet . . . no obligation.*

## **ELECTRIC EYE EQUIPMENT COMPANY**

1930 EAST FAIRCHILD STREET, DANVILLE, ILLINOIS

Manufacturers of: Hurletron R.O.P. Color Registration Controls; Automatic Controls of Caliper and Weight on Paper and Board; Center Line and Side Web Guide Controls; Cut-Off and Back-Up Controls; Slitter Controls; Moisture Controls.

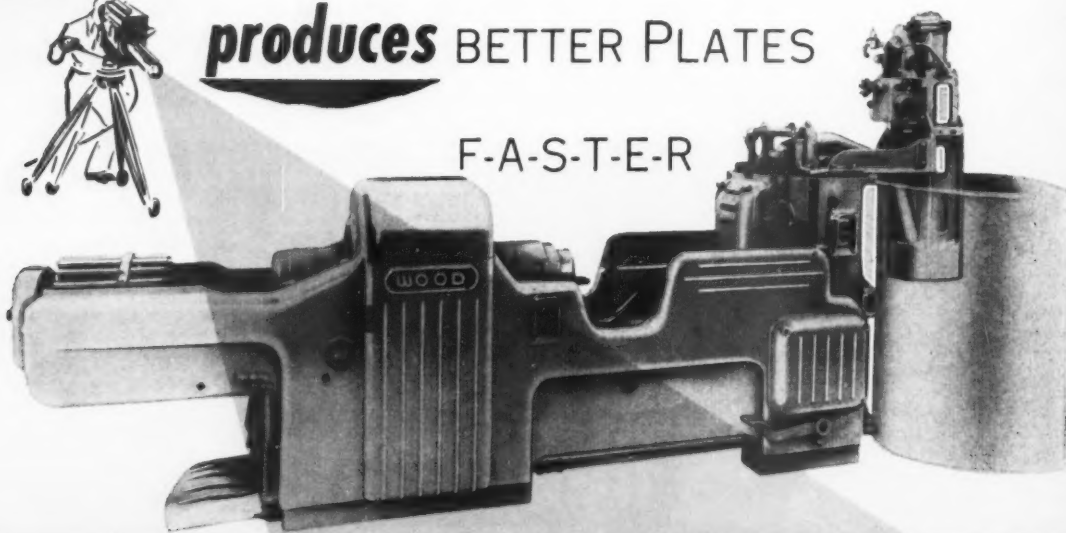
# 1 of 6 reasons why

THE **NEW** HEAVY DUTY PONY AUTOPLATE



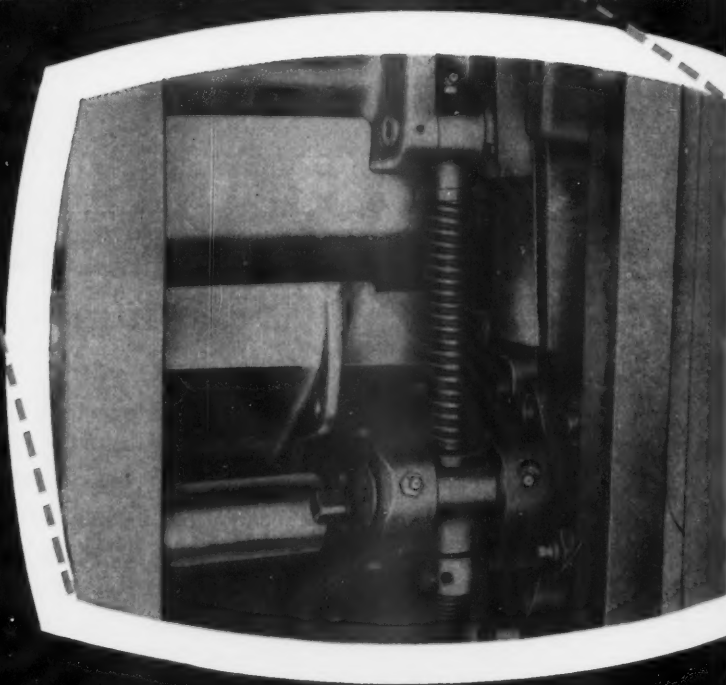
**produces** BETTER PLATES

F-A-S-T-E-R



## REASON # 5 PUSH-BUTTON PLATE LIFTER

The newly cast plate is lifted automatically into position in shaving arch on cam actuated tracks, controlled by push-button operation. Prior to, and during the shaving and tail cutting operation, the plate is locked securely into position by a spring actuating device. Illustration shows a portion of Plate Lifter and Springs which apply pressure to keep plate firmly seated in the Shaving Arch.



**WOOD NEWSPAPER MACHINERY CORPORATION**  
PLAINFIELD, NEW JERSEY

EXECUTIVE AND SALES OFFICE: 501 FIFTH AVENUE | NEW YORK 17, N. Y.

An industry-wide technical magazine published especially for management, production and mechanical executives responsible for printing production and the specification of equipment and supplies used in the commercial, magazine, private plant and daily newspaper fields.

# PRINTING EQUIPMENT Engineer



Volume 85 Number 8

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*Printing Equipment Engineer's* cover this month was designed by Warwick Typographers, Inc., St. Louis. This firm, sparked by Hugh Echele and John Lammereaux, is famed for its fine typography—by hot metal and phototypesetting methods. In fact, much of its business extends over a considerable geographic area. In contrast with our February cover, which was composed predominantly with white space, this July cover was designed with both typesetting and color. We have shown the design to a number of competent typographers. None of them had a word of criticism—which, we feel, in the case of Graphic Arts people, is exceptional. Usually, we are allergic to all-cap composition, but in this instance we like the cap lines—they do read easily because they're short.



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# Letters

TO THE EDITOR

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## *Envelope System*

Are your newspaper production costs high? Perhaps your floor men are hunting materials or instructions instead of doing production work. We have been using a system for the past two years that has done nothing less than miracles in smoothing out

problems in the ad alley and stereotype department. It will help any paper from the 10,000 circulation bracket to the weekly. Our ads come from the advertising department with the mats, zincs or plastic illustrations attached to the layout in a manila envelope. A gummed tag is placed on the envelope with the advertiser's name, day of the week the illustration is to be used, number of pieces of material in envelope and the type of material. The envelope with mats then is sent to the stereotype department for processing. When this is done, the cuts are placed in the envelope and returned to the ad alley. (We are assuming that most everyone is doing shell casting.) We use a two deck ad dump. The ad man goes to the dump for ad material. On top is the copy and type and on the lower deck are all his cuts, plainly marked. No fumbling, hunt-

ing, segregating and confusion. Hours and hours are saved—and something almost as important, if not as important—a smooth working operation.

We remove the gummed instruction sticker from each manila envelope. These are used over and over. True, you may have seen or heard of such a system. But the point is, get it in operation now. You will find it will increase your production in the ad alley and stereo room tremendously. Cost of installing consists of nothing but a little ingenuity. So get busy and save yourself headaches and money for your publisher.

K. MacDonald  
East Oregonian Pub. Co.  
Pendleton, Oregon

# Sheer Power

## MONOMELT POWER SHEAR!

*Accurate*  
*Fast*  
*Strong*  
*Economical*



● Cuts and trims copper, zinc and plastic plates . . . electrotypes, stereotypes. The Monomelt Power Shear is rugged and strong. Built for heavy-duty day-in, day-out service. Hardened tool steel cutting blades make clean, straight cuts. Saves time! Completely eliminates burrs! Speeds production! Equal to three saws. Cuts and trims up to 24" wide.

Maximum safety and protection. No flying metal chips . . . no dangerous whirling saws. Non-repeating foot-operated clutch.

See your dealer or write for complete information.

# THE Monomelt COMPANY, INC.

1611 N. E. POLK STREET • MINNEAPOLIS 13, MINNESOTA

## *Mouse Trap Philosophy Clicks*

Right off the bat, that *Mouse Trap Philosophy* story clicks. But the most striking part of the magazine is the section devoted to the 30 New Plants. This has been done comprehensively and should be of immense benefit to many of your readers. All the technical articles are especially good.

H. E. Langendorff Adv. Mgr.  
The Goss Printing Press Co.

## *Plant Planning Issue Excellent*

We surely do appreciate your having sent the copy of the Annual Plant Planning and Improvement Issue (March). We thought the coverage of our plant was excellent. Thanks a lot.

Geo. W. Chambers, Bus. Mgr.  
Tucson (Ariz.) Newspapers, Inc.

## *Appreciates Cooperation*

At our annual meeting of March 3, our Board of Directors passed a resolution officially expressing appreciation to your publication for the publicity given to the Lithographic Technical Foundation. Please be assured of our gratitude for your fine cooperation in working with the Foundation in its efforts for progress in the industry.

J. Louis Landenberger, Pres.  
Lithographic Technical Foundation

## *Using P-Double-E Indexes*

We have been receiving *Printing Equipment Engineer's* annual index issue for many years. Each new edition we greet with optimism, hoping that the indexing system has been changed. We give up. I don't think you are going to change it. So will you instruct us how to use your system?

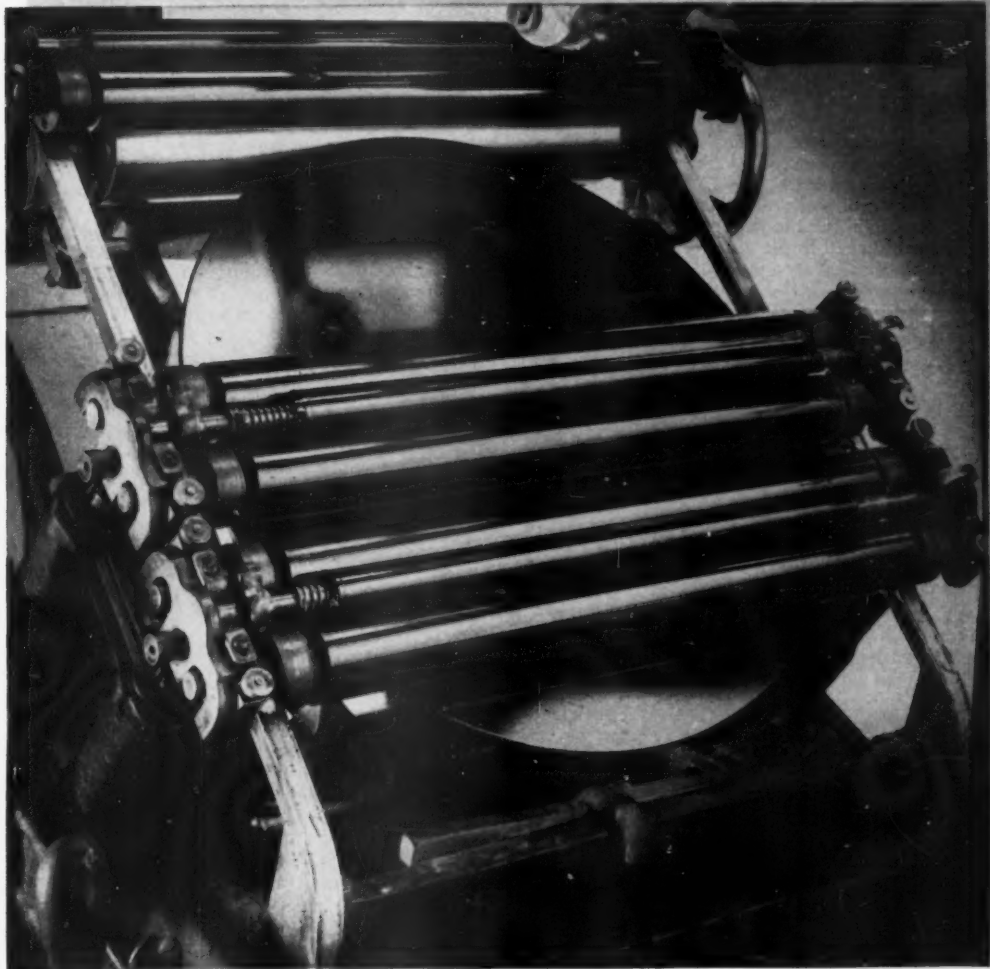
A case in point is as follows: We wanted information on lift trucks. We looked under the Bindery Index . . . I hope you can see the confusion we are in.

Bewildered

Before commenting upon your difficulty in finding a source of supply for trucks, we want to make the following remarks: We agree that if one doesn't comprehend the arrangement of the various indexes, the whole system does look complicated. However, there are 35 separate indexes included in our index system. As you will notice, we have listed vertically along the right edge of the front cover and on page 135 the various indexes together with page numbers. To complement this arrangement, we have printed black spots along the edges of the yellow index sheets to show location of the

(Continued on Page 8)

*Until you get the RIGHT ROLLER... Presswork's a gamble*



For the versatile job press, no rollers have ever given finer results than glue-glycerin composition rollers made by Sam'l Bingham's Son Mfg. Co.

The proven ability of composition to "pick up and let go" is indicated by the ease with which you can clean the ink from the surface with a sweep of your finger. This means less ink can be run, yet there is maximum coverage.

But presses differ—in speeds, in sizes and in principles—and each requires its own kind of "right roller." So whether you use letterpress, offset, flexographic or rotogravure equipment, you can rely on Bingham for the "right roller" in composition, rubber and vulcanized oil to remove the gamble from your presswork.



*The Right Roller right away*

*Rubber rollers re-ground quickly and accurately in each of our modern factories—*

CHICAGO <i>Home Office</i>	CLEVELAND DALLAS	HOUSTON INDIANAPOLIS	MILWAUKEE MINNEAPOLIS	PITTSBURGH ST. LOUIS
ATLANTA CINCINNATI	DES MOINES DETROIT	KALAMAZOO KANSAS CITY	NASHVILLE OKLAHOMA CITY	SPRINGFIELD, O. TAMPA, FLA.

COMPOSITION...RUBBER...VULCANIZED OIL Rollers



## Letters

(Continued from Page 6)

various index titles on the first page of each index.

The indexes primarily are set up by departments in the printing plant. Thus, if you are thinking of a composing machine or foundry type, you would look in 1—Composing Room Index.

In your case, probably you were thinking of a truck for use in the bindery, that being the reason you turned to the Bindery Index in the first place.

Now, if you will look at the black spot opposite the Bindery Index along the edge of either the front cover, or page 135, you will see that when you open the book at that particular spot that the key for the Bindery Index is on page 174. To find out what is listed in the bindery key, please look in the lower right hand corner of page 174 where you are informed that companies supplying trucks may be found by referring to the Paper Cutting and Processing—4D index. Also, if you look on page 178 under Trucks, column 4, you are referred to the Paper Cutting and Processing Index—4D.

Just to explain in detail, there are so many kinds of paper handling trucks used in printing plants that we have grouped those for the pressroom, bindery and the paper handling, cutting and processing departments under one index on page 163.

Now, to locate 4—Paper Cutting and Processing Index by means of the vertical index on the front cover (or on page 135), flex the magazine slightly and note the black spot opposite 4—Paper Cutting and Processing, which will indicate page 163. On this page, in the third column, under 4D—Paper Handling Trucks, seven different kinds of paper handling trucks are listed. This key, like all of the keys for the various indexes, is at the head of the index. Therefore, turning to page 164, under Paper Handling Trucks—4D, you will find enumerated approximately 50 companies supplying paper handling trucks of various kinds. The particular kind of truck furnished by each company is indicated by a symbol immediately following the company address.

As a Plant Manager, we hope that after you have given full consideration to the arrangement of the index and its usefulness you will realize we have packed a tremendous amount of reference material within limited space. It is the most complete index in the industry. Please understand that when consulting any one index, such as you did in the case of the Bindery, sometimes it is necessary to refer the reader to another index.

This index system is patterned somewhat after those adopted by most professional societies and we have always considered our readers as professional men who would like to have reference material prepared for professional use.

### Leadership

You have been very active in leadership in the Graphic Arts and your magazine shows the result of your able leadership.

Felton Colwell  
The Colwell Press  
Minneapolis, Minn.

### Reader's Comment

I enjoy *Printing Equipment Engineer* very much indeed. I think you have a very good magazine.

Andre P. Hugues, Mgr.  
Printing Department  
Harry Turner and Assoc. Inc.  
Topeka, Kansas

### We Make Correction

I would like to bring to your attention two errors which appeared in the April issue, in connection with a caption for the Northwest Conference story. I am associated with the Des Moines (Ia.) *Register* and *Tribune* (not the *Herald* and *Tribune*), and my name is spelled Dorris (not Dorris).

Wm. G. Dorris  
Mechanical Supt.

**Carnegie Tech Equips**—New facilities and equipment in Carnegie Tech's School of Printing Management will be ready for use by this year's summer students. New installations include an Intertype Fotosetter, Vandercook pre-press platemounting equipment, a Linotype Blue Streak Comet with High Speed Teletypesetter, a new EBCo offset press, modernized dark room facilities with temperature controlled sinks and new offset platemaking facilities. Individual courses (June 27 through Aug. 6) will be offered in planning, design, estimating, cost accounting, and management as well as skill development courses in typography, presswork and photolithography. Advance applications may be filed with the Director of Summer Sessions, Carnegie Institute of Technology, Pittsburgh 13, Pa.



## A New Member of Our Family of Fine Engraving Metals!

- *Medium Tempered*
- *Non-Buckling*
- *Clean, Quick Etching*
- *Long-Wearing*

**BE WISE**—order a case of OWL BRAND from your supplier, today!

OWL BRAND is made by the manufacturers of —

**ZOMO ZINC A-Z ALLOY**





*what's in a name?...*

**EVERYTHING!**



**ORIGINAL HEIDELBERG**

*... means the most  
superior press and service  
in the world,  
and, despite Shakespeare,  
a printing press  
by any other name  
is **NOT** as good.*



*the best thing next to a printer*

*main distributors of  
Schnellpressenfabrik, A. G. Heidelberg*

**HEIDELBERG WESTERN SALES CO.**  
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**HEIDELBERG SALES & SERVICE**  
Los Angeles 15, Calif.; Columbus 15, Ohio;  
Chicago 16, Ill.; Kansas City 6, Mo.;  
Minneapolis 15, Minn.; Salt Lake City, Utah;  
Denver 2, Colo.; Atlanta 5, Ga.; Portland, Ore.  
San Francisco 3, Calif.; Seattle, Wash.



*Behind*  
**the 8 Ball on**  
**Type Metal Problems**



Then—you're just the man we want to see. Serving the graphic arts exclusively, we have helped thousands keep their type metal supplies at the correct working analysis through the Imperial Plus Plan. This same service can be yours—for the asking. Tell us when to see you.

**IMPERIAL**  
**TYPE METAL COMPANY**  
 PHILADELPHIA 34 • NEW YORK 7 • CHICAGO 50

**Imperial**

SERVING THE GRAPHIC ARTS *Exclusively*



Low-cost Slic has eliminated metal build-up on line-casting machines in many hundreds of composing rooms since its introduction less than a year ago. Clean and efficient, Slic prevents metal from adhering to molds, vise jaws and other parts of the machine, before trouble can begin.

Slic is an emulsion — harmless to metals and human skin — containing 35% silicone. This higher silicone content makes each application last longer. Once a week for front and back mold wipers is usually sufficient and many users report much longer intervals between use.

Order the trial size if you haven't used Slic already. If you're acquainted with Slic, take advantage of the economy of the 16 oz. size at \$4.35.



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**LINOTYPE**  
**PARTS**


*Company, inc.*

SOUTH HACKENSACK, N. J.



RAPID SERVICE PRESS BOSTON, MASS.

*Profits  
are made  
from  
active  
business*



E. J. STORM PRINTING COMPANY, DALLAS, TEX.

Profits are made from active business — profitable business such as is enjoyed by foresighted Miller press owners. Thousands of Miller presses are widening profit margins by giving higher productive speeds, lower operating costs, and savings in valuable floor space. You can produce quality work at less cost with Miller presses. Write today for further details and specifications.




MILLER

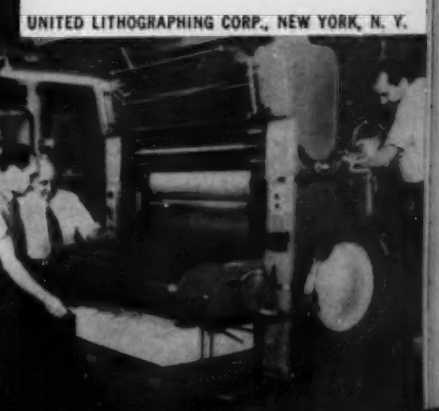


THE GIBSON ART COMPANY CINCINNATI, O.

**MILLER PRINTING MACHINERY CO.**  
1117 Reedsdale St. Pittsburgh 33, Pa.  
*Miller Printing Machinery Co. of Canada Limited*  
730 Bay Street Toronto 2, Ontario



THE BENHAM PRESS, INDIANAPOLIS, IND.



UNITED LITHOGRAPHING CORP., NEW YORK, N. Y.

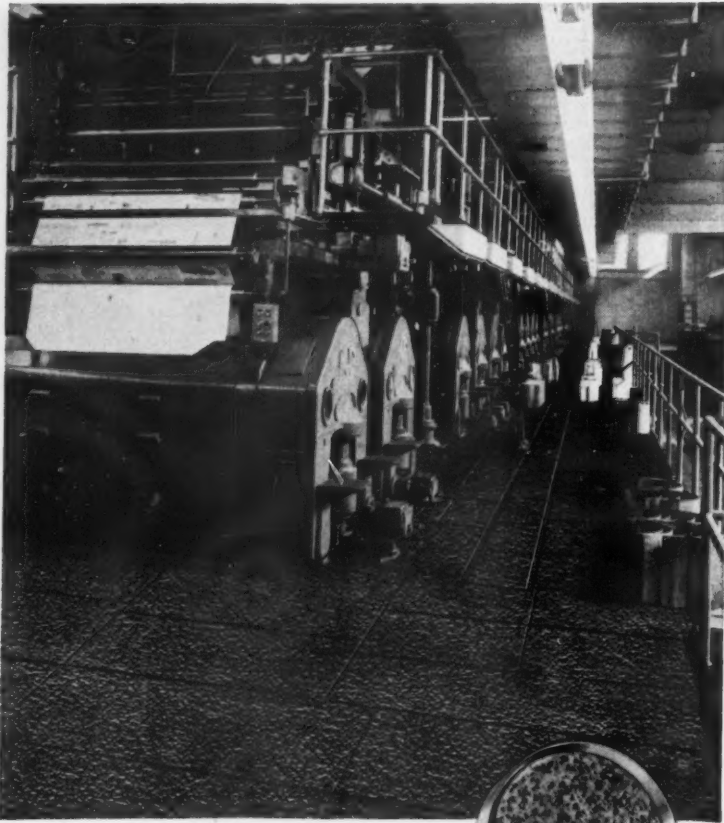


THE SHERWIN WILLIAMS COMPANY CLEVELAND, O.



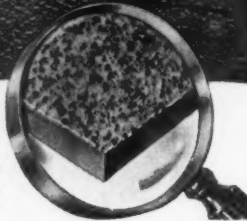
# Good News

for Pressmen at the  
**AKRON BEACON JOURNAL**



This Beacon Journal press is equipped with Algrip walkways on the upper level, giving protective footing between press units as well as on the main floor.

Magnification shows the even distribution of abrasive . . . that magnifies foot safety.



*Safety . . . is the good news in the Akron Beacon Journal pressroom. The Ohio daily joins the list . . . steadily growing . . . of newspapers using ALGRIP Abrasive Rolled Steel Floor Plate to protect their workers against the slipping hazards that ink mist and oil produce on pressroom floors.*

More than 31 leading newspapers . . . total daily circulation almost 5 million . . . have found the safety value of the *only* abrasive rolled steel floor plate. ALGRIP's abrasive . . . deeply and uniformly embedded . . . gives permanent protection against slipping hazards in pressroom . . . stereo and composing rooms . . . mailroom . . . on levels or ramps—wherever sure footing is a "must."

And ALGRIP's safety keeps dollars from slipping away . . . lowers insurance costs . . . helps pay for itself. Send for our new ALGRIP Foot Safety booklet, AL-31.

## A.W. ALGRIP



Approved for safety by Underwriters' Laboratories  
NATIONWIDE APPROVAL—ALGRIP-Safetyized newspaper installations include: The Bulletin, Philadelphia, Pa.; Detroit Free Press; Cleveland Plain Dealer; St. Petersburg Times; Seattle Times; Flint Journal; Miami Herald . . . Complete list supplied on request.

### ALAN WOOD STEEL COMPANY

Conshohocken, Pa.

Other Products: A. W. SUPER-DIAMOND Rolled Steel Floor Plate • Plates • Sheets • Strip • (Alloy and Special Grades)

## Equipment and Supplies

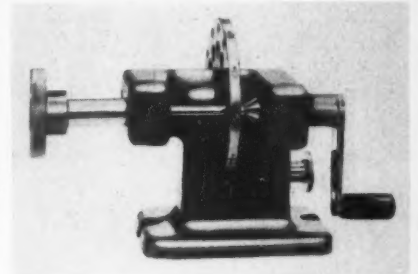
If you wish additional information concerning equipment, supplies and/or technical literature, please make your request to **PRINTING EQUIPMENT Engineer, 1276 West Third St., Cleveland 13, O.**

### Miehle Adds Offset Presses

The Miehle Printing Press and Mfg. Co. has announced the addition of two new machines to its line of offset presses. Soon to be presented to the Graphic Arts Industry are the Miehle No. 38 Single Color and Two Color Offset Presses. Both of these presses will print a 25 in. by 38 in. sheet at speeds up to 7000 i.p.h. In his recent letter of announcement, Carlton Mellick, vice president-sales, stated: "The No. 38 Offset has been specifically designed for the combination plant. It is the 'small press' for the large plant and the 'large press' for the small plant." He further stated: "In a short time we will have a two-color press on display in our Chicago demonstration room, and will start making shipments in the fall of 1955." For further details, please mention PEE No. 483 in your request.

### Hollow Drill Sharpener

E. P. Lawson Co. has developed a Hollow Paper Drill Sharpener, designed to eliminate drill breakage due to improper sharpening. This bench type machine tool, sponsor states, is fitted with a precision rotatable guide or disk with index holes to accommodate hollow drills from  $\frac{1}{8}$  in. to  $\frac{1}{2}$  in.



graduated by  $\frac{1}{32}$  in. To sharpen hollow drills, the guide or dial is rotated until the hole corresponding to the size of the drill to be sharpened is opposite the holder or drill chuck. The hollow drill to be sharpened is then inserted in the holder or chuck. The handle is now turned to sharpen the drill. For further details, please mention PEE No. 465 in your request.

### Printing Press Wash

A one-solution printing press wash called Squeaky-Kleen, by the use of which it is claimed press down-time can be cut two-thirds, has been announced by Sun Supply Co. Div. of Sun Chemical Corp. The solution is designed for use on rubber rollers and blankets. On any press equipped with an automatic washer, Squeaky-Kleen is applied to the ductor roll and allowed to run through the press until all ink is removed. Then clear water is applied to the

(Continued on Page 14)

# FIRST CHOICE OF PRESSMEN

The men who know a press best are those who work on it day in and day out. They appreciate conveniences and superior performance.

The HEADLINER — because of its accessibility, advanced design and unexcelled printing qualities — is truly a *pressman's press*.

Among outstanding HEADLINER features appealing especially to pressmen are: automatic lubrication of units and folders . . . fingertip Colortrol (with conveniently located waist-high and shoulder-high panels, eliminating kneeling and stooping and climbing) . . . Continuous Ink Feed . . .

**GOSS** *Headliner*<sup>®</sup>  
**PRESS**

WORLD'S NUMBER 1 NEWSPAPER PRESS

Goss Tension Plate Lockup . . . folded-edge forward delivery . . . visual micrometer impression adjustment . . . pre-loaded tapered roller bearings . . . fully enclosed folding motion . . . balanced unit drive (reducing web breaks) . . . heavy-duty Uniflow folder (delivering up to 96 pages collect without adjusting folding and cutting cylinders) . . . independent ink vibrator drive . . . self-locking gear type clutch.

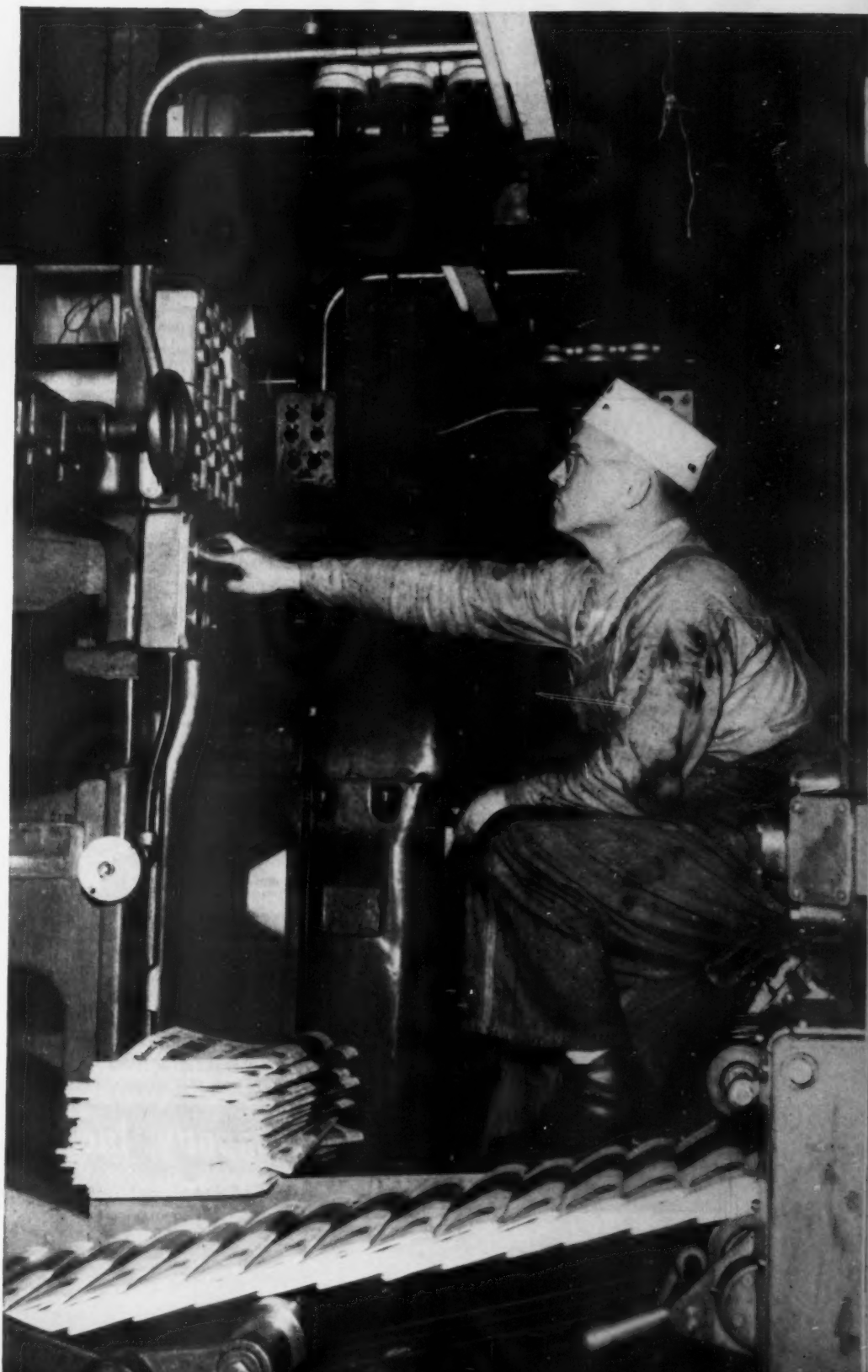
These are only a few of the many HEADLINER *first* or *exclusive* features which assure the finest printing quality and full flexibility for ROP color. Moreover the HEADLINER is engineered and constructed ruggedly for maximum strength in every part — built to run and to *last*.

The Goss research staff is not content with the HEADLINER's undisputed leadership in advanced design and performance, but is constantly making improvements, as Goss has been doing since the first HEADLINER was placed on edition.

There are many reasons for the name HEADLINER, but HEADLINER is more than a name: it is a guarantee of the *finest in newspaper presses*.

**THE GOSS PRINTING PRESS CO.**

5601 W. 31st Street, Chicago 50, Illinois





## Equipment & Supplies

(Continued from Page 12)

ductor roll and allowed to run through the press until the rollers are clean. Blankets are washed by hand in the usual manner; first using a cloth soaked with Squeaky-Kleen, and then a cloth soaked with water. Please mention PEE No. 468 in your request for further information.

### Glass Cleaner

Clearview Glass Cleaner was developed especially for the Graphic Arts Industry says

the manufacturer, nuArc Company, Inc. It comes in a 12 oz. spray can. The cleaner is greaseless, stain-free and leaves no film, according to nuArc. For further details, please mention PEE No. 484 in your request.

### Data Book Revised

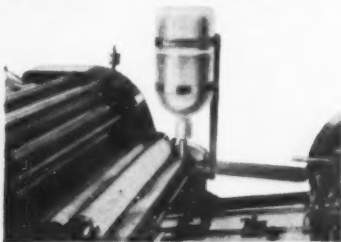
Eastman Kodak Co.'s data book, Kodak Graphic Arts Films and Plates, is available in a revised edition. The book contains information on handling and processing light-sensitive materials in photo-mechanical reproduction. Speed indexes for each film and plate listed are compensated for the ultraviolet absorption of average process lenses. A glossary contains definitions of photographic terms. Copies can be obtained through Kodak dealers for 75c each.

Get better, more profitable printing—with  
**BALDWIN equipment!**



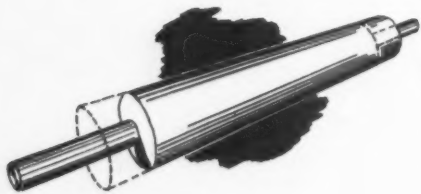
### BALDWIN INK AGITATORS

—Continuous traveling rotating cone keeps ink against fountain roller, uniform on the job in mill condition. Cone is simple to remove and clean. Separate motor drive. Applicable to almost any offset or letterpress fountain.



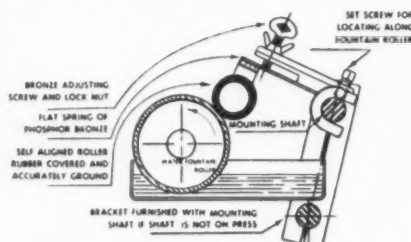
### BALDWIN WATER LEVELS

—Automatically maintain constant fountain solution level, stabilize fountain setting, save pressman's time. Unbreakable polyethylene container has automatic non-spill valve — keeps solution supply visible.



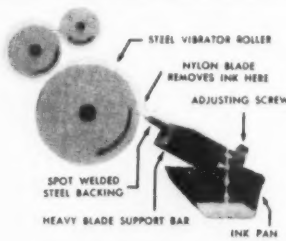
### BALDWIN VIBRATING ROLLERS

—Improve ink and water distribution to reduce "layout ghosts" on offset and letterpress presses. Standard stroke, 3 to 6 inches—longer on special order. Diameters to fit small spaces.



### BALDWIN WATER STOPS

—Make moisture control easy and positive, end flood and dry-up problems, eliminate frequent hand settings. Fully adjustable to all requirements, easily installed. 2 to 10 inch sizes, longer on special order.



### BALDWIN PRESS WASHERS

—Give fast, clean washups automatically, without ink roller removal. Adjustable nylon blade guaranteed six months, easily replaceable. For offset and letterpress.

Manufacturers of:

BALDWIN INK FOUNTAIN AGITATORS • BALDWIN VIBRATING ROLLERS  
BALDWIN PRESS WASHERS • BALDWIN WATER STOPS • BALDWIN WATER FOUNTAIN LEVELS

**William Gegenheimer Company, Inc.**

80 Roebing Street

Brooklyn 11, New York

### For Steel Rule Diemaking

Bar-Plate Mfg. Co. has announced three pieces of equipment for the steel rule diemaking industry. One is a layout machine for steel rule diemaking (Fig. 1). The overall size of the machine is 60 in. wide by 48 in. deep by 36 in. high. It is designed to

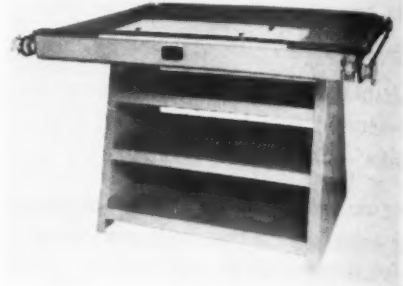


Fig. 1.

handle any thickness die wood to 36 in. by 48 in.

The machine is supplied with a free moving precision horizontal straightedge with a vernier control. The straightedge is made of tempered stainless steel, all surfaces ground and polished. The straightedge is operable from all sides by both vernier control and hand knobs. In operation the die wood is set into place up against the adjustable squaring bars and firmly locked in that position by one or two slides. Below the machine are three shelves for storage of die wood.

The company also is making the Bar-Plate Steel Rule Storage Cabinet (Fig. 2). It is made in three sizes to hold 24-in., 30-



Fig. 2.

in. or 36-in. cartons of steel rule and is 20 in. wide and 15 in. high. The cabinet is fitted with three shelves and designed to hold a total of 45 boxes of steel rule. Additional storage units can be placed on top or beside the original cabinet. The unit can be

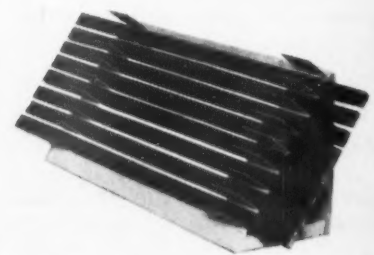


Fig. 3.

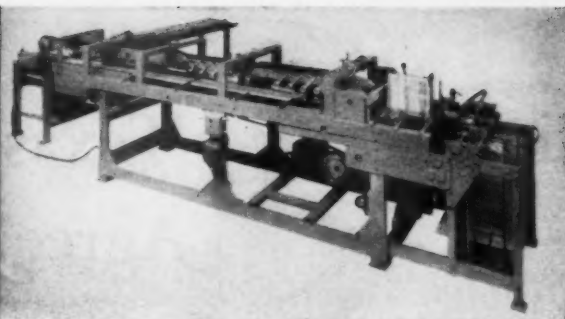
placed on a table (Bar-Plate manufactures a base stand for the cabinet) or on the floor.

The Bar-Plate Steel Rule Storage Rack (Fig. 3) also is being marketed by the firm. The storage rack is designed for use on the

(Continued on Page 20)



CUT COSTS  
ON  
PUBLICATION  
MAILINGS



# The CMC AUTO-WRAP PAYS FOR ITSELF 3 WAYS

1. Lower wrapper costs
2. Elimination of hand work
3. Conservation of space

In addition to actual cash savings that will quickly repay your investment, the CMC Auto-Wrap will help you to get publications and catalogs off your floor and into the mail faster. That means better service for your customers at lower cost to you. One plant, formerly mailing 35,000 copies in envelopes, is saving \$19,000 per year on wrapper costs alone! In many plants, one Auto-Wrap and one operator have replaced a complete hand-wrapping department.

Here are just a few of the Auto-Wrap features that can speed up your wrapping operation, and save real cash for you:

- Automatically wraps or bands up to 7200 copies per hour.
- Handles periodicals of every popular page size, in thicknesses from 1/64" to 1".
- Requires only one operator—to supply books and wrappers.
- Book hopper loads from top, feeds from bottom; no machine shutdown for refilling.
- Delivers wrapped periodicals to mailing crew fanned out on 12-foot variable-speed conveyor.
- Quick change-over for different book size or switch from fold-wrap to flat-wrap.

See how Auto-Wrap can help you keep costs down. Send for Bulletin No. 30, which gives complete description of functions and specifications.



**FLAT WRAPS**—Smooth, tight wrap protects book. Periodical reaches readers in bindery-fresh condition.

**FOLD WRAPS**—Delivers wrapped books with either smooth or seamed side up.

**BAND WRAPS**—On any size publication, in any location, for newsstand promotion.

*Auto-Wrap is distributed exclusively by:*

**L. C. MARTIN AND ASSOCIATES**  
894 Linden Avenue, Winnetka, Illinois

*Manufactured by*  
**CLYBOURN MACHINE CORPORATION, Chicago**

L. C. MARTIN and ASSOCIATES  
894 Linden Ave., Winnetka, Ill.

Send full information on CMC Auto-Wrap.

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

PE-5

Traditional

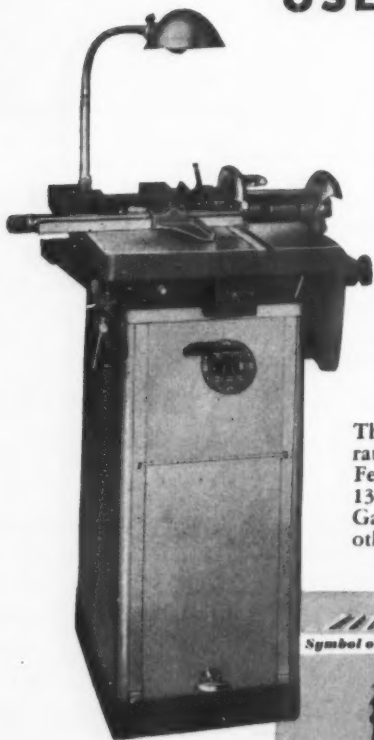
Texas

Rivals

Agree...



NEWSPAPERS IN  
**FORT WORTH • DALLAS**  
 USE 35 MORRISON SAW TRIMMERS



Despite their vigorous friendly rivalry in most things, Dallas and Fort Worth newspapers agree on one thing — the superior efficiency and labor-saving benefits of MORRISON SAW TRIMMERS. You'll find a total of 35 Morrison Saw Trimmers in operation today in the composing rooms of the *Dallas News*, *Dallas Times-Herald*, *Fort Worth Star-Telegram* and *Fort Worth Press*. In each case you'll see the saw trimmer working close to makeup tables, speeding up production flow, paying for themselves by time, step and effort-saving for each compositor. If you haven't already done so, check now into the benefits of Morrison Saw Trimmers in your plant.

**MORRISON 3-A SAW TRIMMER**

The fastest, most versatile, safest and most accurate Saw Trimmer your money can buy today! Features include: "Behind the Gauge" workholder, 135-pica Extension Gauge, Miter and Line-Up Gauge, Any-Angle Gauge, Saw Grinder, and many others.

*Write for catalog on:*

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Symbol of Operating Economy

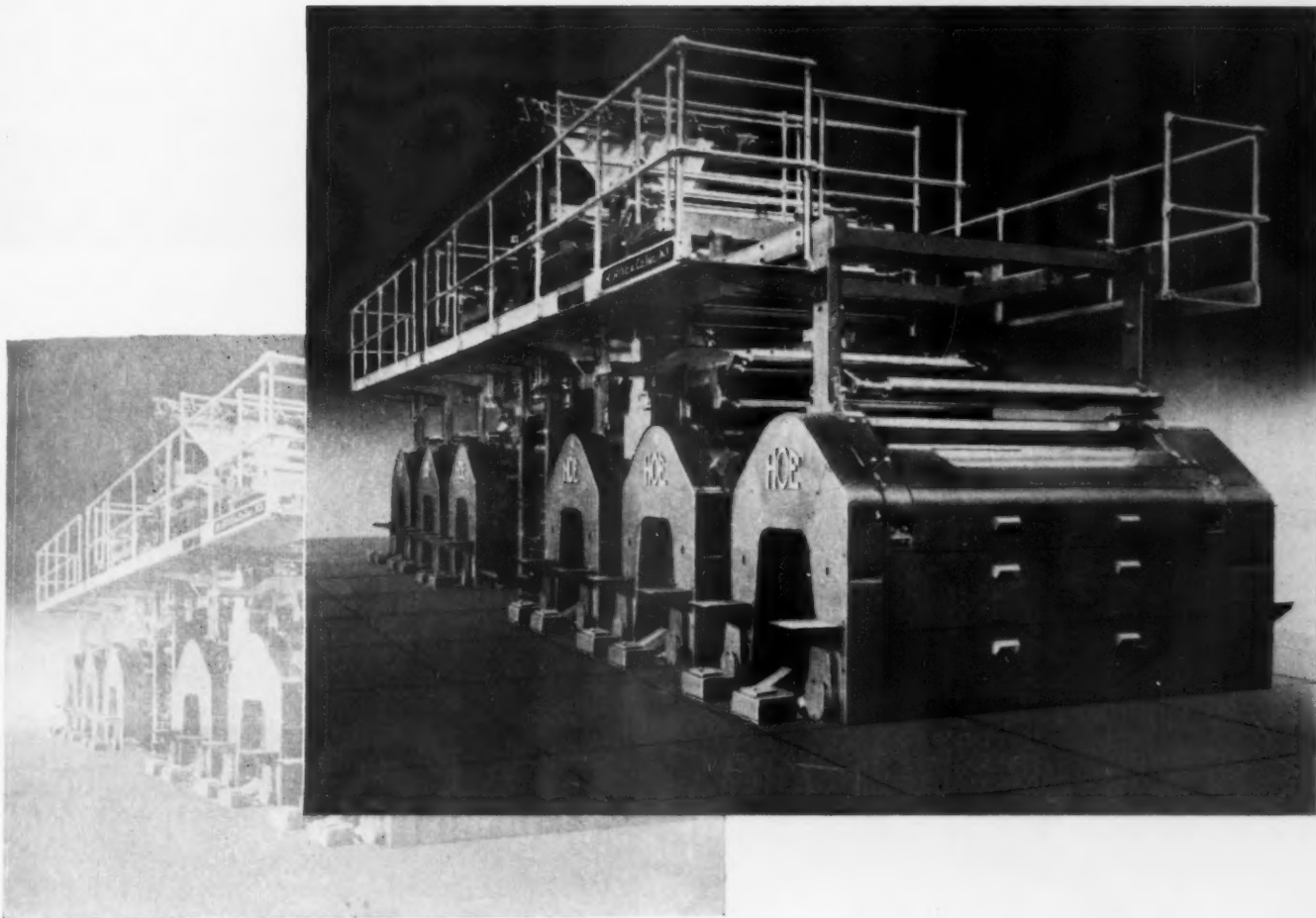


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 PRECISION MACHINES FOR THE GRAPHIC ARTS INDUSTRY

125 W. Melvina Street, Milwaukee 12, Wisconsin

# Newark Star-Ledger

doubles its battery of  
**HOE COLOR-CONVERTIBLE PRESS UNITS**



With the largest morning and Sunday circulations of any newspaper published in New Jersey, the *Newark Star-Ledger* is anticipating the needs of its future growth by doubling its battery of HOE COLOR-CONVERTIBLE PRESSES.

Six COLOR-CONVERTIBLE units, with color-printing facilities, were placed in operation in October, 1950, and six more such units are now being installed, complete with Hoe reels, automatic tensions and web-splicing mechanisms.

With both batteries equipped for full ROP color production, the *Star-Ledger* will have the most extensive facilities in the state to meet demands of advertisers for color.



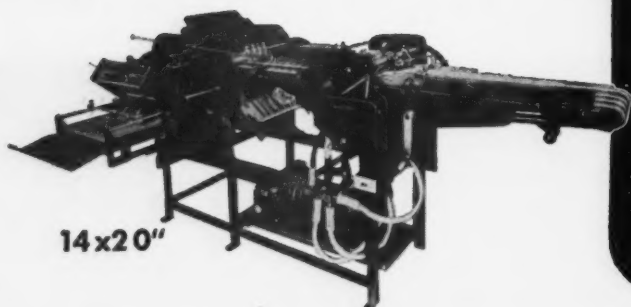
**R. HOE & CO., INC.**

910 East 138th Street New York 54, N.Y.  
BRANCHES: BOSTON • CHICAGO • SAN FRANCISCO  
BIRMINGHAM • PORTLAND, ORE.





# There's a Cleveland for



14x20"

## Cleveland Model, "WW" Folder

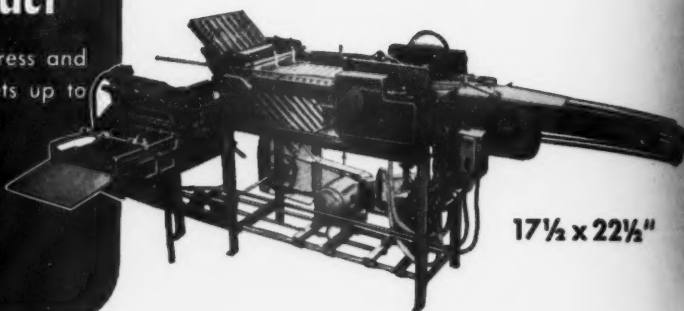
With Continuous Suction or Friction Feeder

Handles letters, circulars and folders. Makes one fold, two parallel folds or a combination of parallel and right angle folds. Automatically feeds and folds sheets as large as 14 x 20" and as small as 3 x 4". Two fold plates in parallel section followed by three in right angle section. Rubber rolls optional.

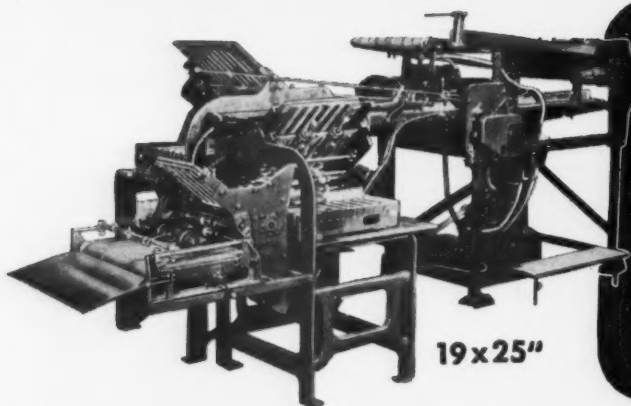
Can be equipped with small signature attachment for folding package inserts and "miniature folds", down to 3/4".

## Cleveland Model "AT" Folder

Efficiently handles the product of 17 1/2 x 22 1/2" letterpress and offset presses. Folds accurately, at high speeds, sheets up to 18 x 24" in wide variety of impositions. Four fold plates in parallel and four in the right angle section provide for flexibility of product. Adjustment is simple, construction sturdy. Small signature attachment available for folds as small as 3/4" width.



17 1/2 x 22 1/2"



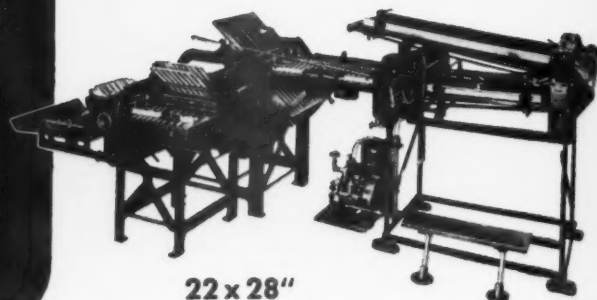
19x25"

## Cleveland Model "OS" Folder

Ideal for the small and medium sized job printing plants. Handles maximum sheet size of 19 x 25" and minimum of 4 x 6". Three folding sections of parallel and right angle folds. Folds 16 page signatures in three right angles in page sizes from 6 1/4 x 9 1/4" maximum to 2 1/2 x 3" minimum.

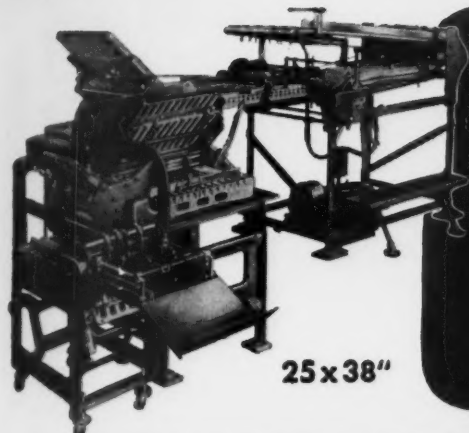
## Cleveland Model "OO" Folder

Popular model for the medium sized popular printer or lithographer. In its size range are included all folding combinations of parallel and right angle folds. The model "OO" handles sheets for parallel folds up to 22 x 34" and right angle folds up to 22 x 28" with a minimum sheet size down to 4 x 6".



22 x 28"

every folding requirement..!



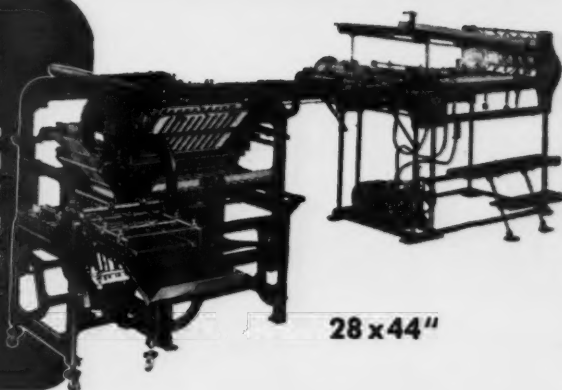
25x38"

### Cleveland Model "MS" Folder

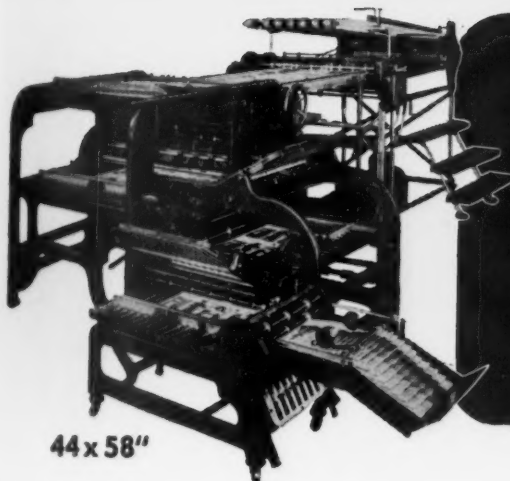
Serves medium sized printing plants with volume work where trade binderies are not readily available. Maximum sheet size 25 x 38" for both right angle and parallel folding and for work and turn up to 38 x 50". Its range includes all types of folds on 25 x 38" sheet including gang work and right angle multiple signatures. Uses minimum of floor space and its versatility gives it an unusually high earning power.

### Cleveland Model "MM" Folder

This model Cleveland can make one to four parallel folds in sheet sizes from a maximum of 28 x 58" down to 5 x 7" and one to four right angle folds from a maximum of 28 x 44" down to 8 x 8" plus all practical combinations of parallel and right angles folds. It can also handle gang work and right angle multiple signatures. Profitable for printers and lithographers as well as binders.



28x44"



44x58"

### Cleveland Model "KK" Folder

Can handle sheets up to 44 x 64" in the parallel sections and 44 x 58" in the right angle with a minimum of 12 x 16". The KK will make one to four parallel or right angle folds plus all practical combinations of parallel and right angle folds within its range. A map folding attachment is available.

ILLUSTRATED CIRCULARS ARE AVAILABLE FOR ANY OF THE ABOVE MACHINES

**DEXTER FOLDER COMPANY**

*General Sales Office*

330 West 42nd Street New York 36, N. Y.

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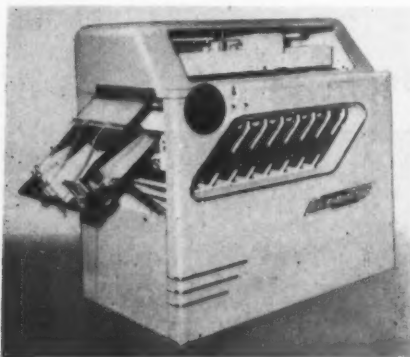
## Equipment & Supplies

(Continued from Page 14)

diemakers table or for fastening on the wall. Like the other two units, it is of steel construction. The rack permits quick selection of the proper thickness, hardness, and height of rule for the job. It is available in three sizes, that is with 8 compartments, 16 compartments, or 24 compartments. For further information on any of these pieces of equipment, please mention PEE No. 480 in your request.

### Eight Station Collator

Cummington Corp.'s Model 85 Collator is designed for light manifold paper interspersed with heavy ledger. Double suction-cup pickups and air jet rifiers, states sponsor, assure single-sheet feeding. The ma-



chine gathers in sets of up to 8 sheets at a rate of 10,000 sheets per hr. Sheet sizes from 5 in. by 7 in. to 11 in. by 14 in. can be handled. Total floor space occupied by the collator is 31 in. by 63 in. It can be connected to any 115 v., 60 cy. circuit. Please mention PEE No. 469 in your request for further information.

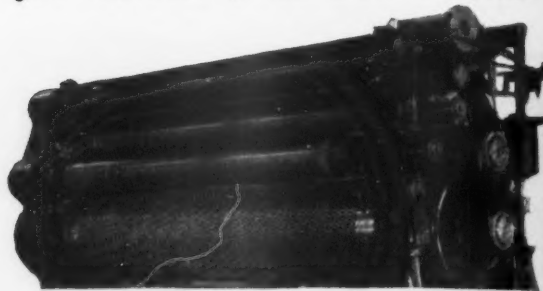
### Static Eliminator

The nuArc Static Eliminator comes in a 12 oz. spray can. It will not shrink nor swell packing, nor damage equipment, says the manufacturer, nuArc Company, Inc. The spray may be used on feedboard, delivery tapes, jogger boards, stripper fingers, drive belts, press tympan, or under packing of the cylinder. For further details, please mention PEE No. 485 in your request.

### Aims in Any Direction

Further amplification of its recently developed No-Offset Atomizing Gun has been announced by Paasche Airbrush Co. The latest development is an atomizing gun in which are featured adjustable heads which pin-point specific areas to eliminate offsetting. Designed with swivel arms which revolve to any angle within a 360 deg. radius, the fluid units can be turned toward any portion of the press sheet. Available in one, two, three or four head units, the spray coverage on sheets is up to 120 in. in width. Swivel adjustment permits each press run to be treated uniformly according to individual requirements. Sponsor states low air volume atomizes the solution on the sheet. It is also said that letterpress, offset and other presses can be equipped to avoid offsetting on difficult multi-colored runs,

for low cost addition of  
third and fourth colors  
for Miehle Flat Bed Presses



Western Printing Machinery's Extra Color Letterpress Unit for Miehle flat bed presses is the answer for low cost addition of third and fourth colors.

Precision built in several sizes, it will make a three or four color press of any standard 2-color Miehle flat bed. Production specifications are the same as the press to which it's permanently attached. Synchronization is perfect. Only minor changes are required for its installation.

This unit is low in cost and requires no additional floor space as it is mounted on top of the Miehle units. Operates efficiently and economically with the Miehle.

Write for further details.

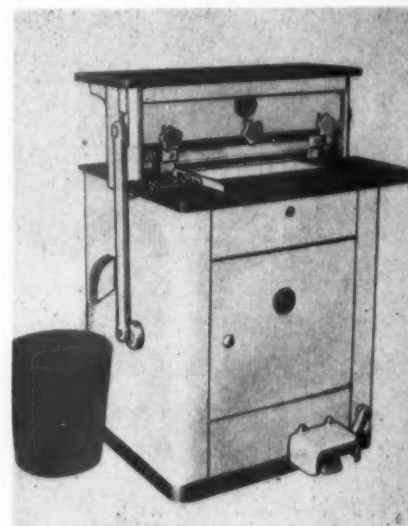
**WESTERN PRINTING MACHINERY CO.**  
3519 N. Spaulding Avenue  
Chicago 18, Illinois



overprinted back to back on any type of paper including Cellophane, plastics and polyethylene. For further details, please mention PEE No. 467 in your request.

### Southworth Power Punch

A Power Punch on which can be punched one or many holes of any desired shape in lifts or in continuous forms has been an-



nounced by the Southworth Machine Co. It can also be used to do tab and index cutting, round cornering and perforating. Punching can also be done on papers of various weights, leathers, plastics, canvas,

(Continued on Page 22)



## Are late cuts holding up your stereos?



Cast well ahead with right-size blanks for missing pictures, stereos are stacked and ready for run.

### You need a **SCAN-A-GRAVER**

Working with a SCAN-A-GRAVER, forms can be made up with blanks for missing cuts and stereos can be cast in advance. When pictures arrive, SCAN-A-PLATES® are engraved in minutes and mounted right on the stereo. You print direct, avoiding the quality losses which often occur in matting.

You can see from this that SCAN-A-GRAVER allows you to schedule stereo work on a steady production-line basis without waiting for cuts. This means fewer slack periods and bottlenecks.

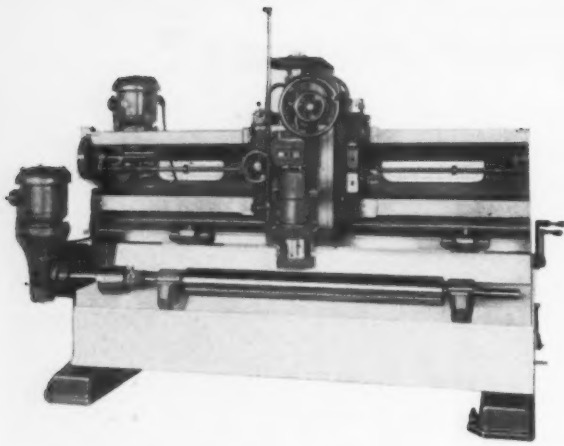


When SCAN-A-PLATES with their double-backed tape are ready, simply press them in place on stereo and start the run.

• Want to know more about SCAN-A-GRAVER? Write for full information about its advantages and how it will simplify your production schedule. Address Fairchild Graphic Equipment, Inc., 88-06 Van Wyck Expressway, Jamaica, New York, Department 100-93E1.

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**SCAN-A-GRAVER**

Electronic Engraving Equipment



**ROTOGRAVURE  
GRINDING AND POLISHING MACHINE**

*Precision Built to Grind and Polish to .0003"*

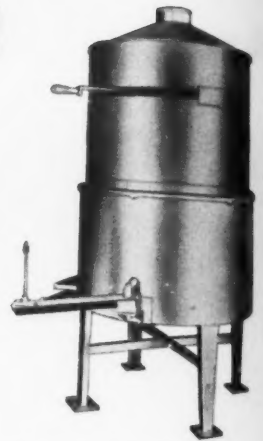
Sold to the Gravure Industry for:

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with a  
'SURFACE'  
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**SAVE TIME.** Melts 5,000 lbs. of lead in only 2 hours. Bottom outlet with casting trough, easily swung through large arc, facilitates pig casting. **SAVE SPACE.** Hood doors, bottom outlet and valve handles can be positioned conveniently no matter where the furnace is to be placed. **SAVE FUEL.** Simple-adjusting 'Surface' burners insure complete combustion, maximum efficiency.

Pick the right furnace for your production requirements from 5 sizes with capacities of 100-5,000 lbs. They use natural gas, manufactured gas, or LP gas. Temperatures up to 1200F.

Call your 'Surface' representative or write for Literature H54-13.

**SURFACE COMBUSTION CORPORATION, TOLEDO 1, OHIO**

**Equipment & Supplies**

(Continued from Page 20)

cloth and light metals. Holes can be punched up to 24 in. apart with no limit on margin distances. Punch heads are installed and adjusted from the front. Chips are removed from the working surface by a motorized chip disposal unit. The working surface is floodlighted. For further details, please mention PEE No. 466 in your request.



**Cold Type Method**

The new version of Davidson Corporation's Reditype is a nonmachine method of cold type display composition. Reditype letters are bonded to a translucent sheet of vinyl acetate. The letters are self-adhering and reusable. These can be pressed into place with the finger tips. Materials are available to compose a page of copy up to 17 in. by 22 in. without developing, printing, cutting or pasting. Type sizes range from 36 pt. to 72 pt. and in some cases 144 pt. For a copy of new illustrated bulletin, please mention PEE No. 477 in your request.

**Hand Fork Trucks**—The Hi-Lo Stacker is a new line of battery-powered, tilting fork hand trucks announced by Clark Equipment Co. This line includes units with 1500, 2000, 2500 and 3000 lb. capacities and 24 in. load centers. The line is part of Clark Equipment's Powrworker series of hand trucks. Equipped with telescopic channel uprights, the Stacker line provides a maximum free lift of 64 in. With non-telescopic channels, the line provides a maximum lift of 66½ in. For further information, please mention PEE No. 482 in your request.

**Mistral Type Face**

A new type face, Mistral, is being offered by Amsterdam Continental Types & Graphic Equipment, Inc. Designed by Roger Excoffon, a French artist working

48 POINT

*mistral*



for Fonderie Olive, Mistral gives a hand-lettering effect. Natural wear of the type is not readily apparent because of a rough pencil outline to the letters. Each lower case letter is stamped on the shoulder with a roman identification. Sizes run from 12 to 72 pts. For more information, please mention PEE No. 479 in your request.

**Router Bits**

Geo. Tarpley Co. announces a new router bit with a 5/8 in. diam. shank, designed to reduce breakage especially in the large size bits. This shank will fit all Sta-Hi Master routers and late model routing machines with Jacobs-key type chucks. The new tools are made in sizes 3/8 in., 1/2 in., 5/8 in., and 3/4 in. style "A" for stereotypers and electrotypers. For further details, please mention PEE No. 486 in your request.

IN 58 CORNERS OF THE U.S.A.—

# Cline-Westinghouse SERVICE!



**WITH DAY AND NIGHT PHONES  
CLINE AND WESTINGHOUSE HAS SET  
NEW HIGHS IN STANDARDS OF SERVICE**

For the overwhelming number of newspapers ordering and installing Cline-Westinghouse Drives and Controls, three Cline Electric Service Offices and 55 Westinghouse Engineering and Service locations, with qualified factory trained men, are located strategically over the U.S.A.—all on 24-hour alert.

**FOR DAY OR NIGHT SERVICE . . . CALL CLINE FIRST**

Cliffside 4-7500, Chicago  
Venable 6-0701, New York  
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## Cline-Westinghouse Drives and Controls

CLINE ELECTRIC MANUFACTURING COMPANY  
3405 West 47th Street, Chicago 32, Illinois  
Los Angeles 17, California • New York 17, New York

Contact first your closest Cline office!

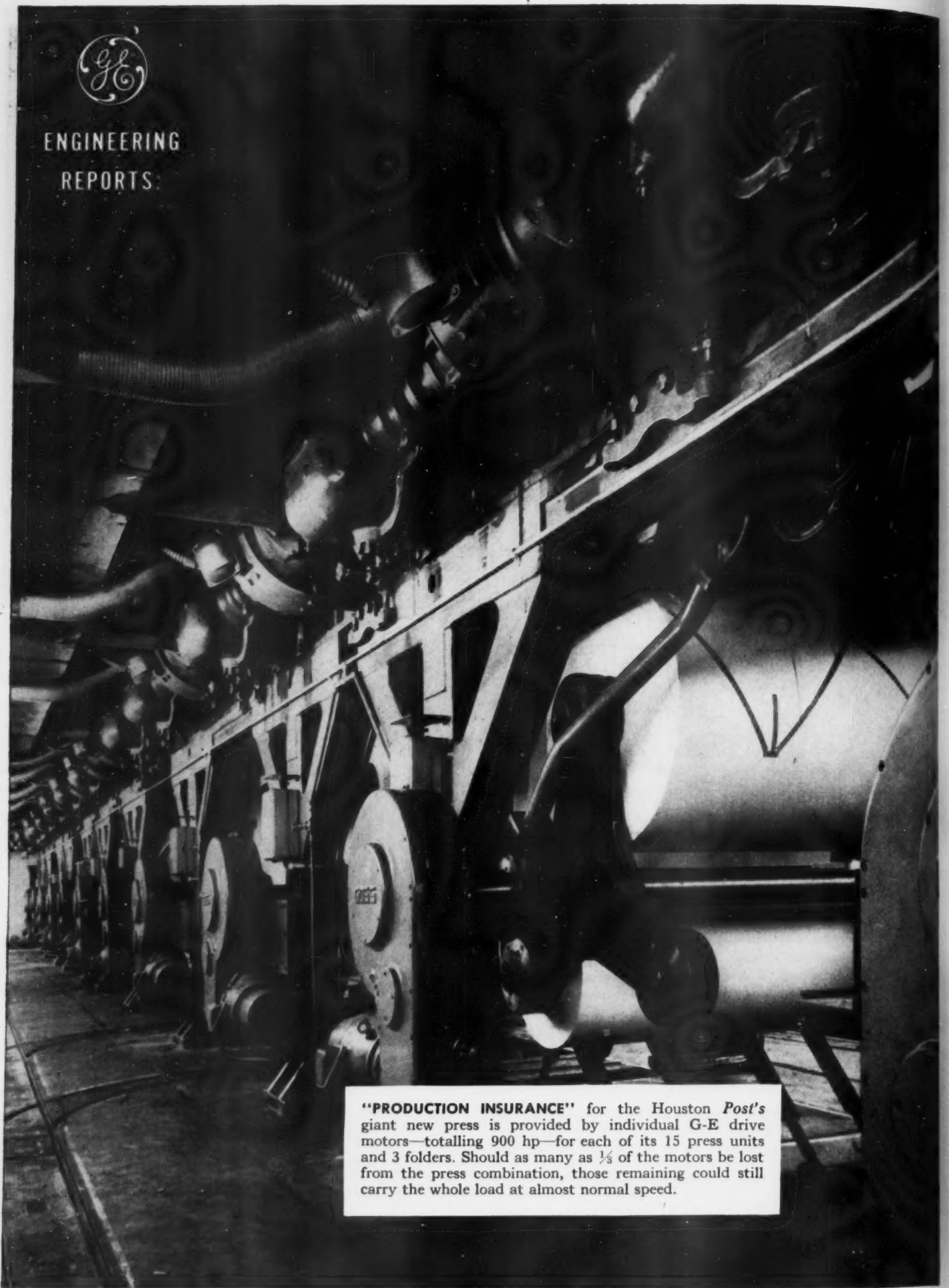
These Cline offices are backed up by Westinghouse's Engineering & Service locations — also available for service!

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Atlanta, Georgia	ATwood 1642
Baltimore, Maryland	Plaza 2-0300
Beaumont, Texas	4-1481
Birmingham, Alabama	53-2411
Boston, Massachusetts	Liberty 2-0600
Bridgeport, Connecticut	4-0151
Buffalo, New York	WAhington 3966
Charlotte, North Carolina	6-6461
Cincinnati, Ohio	GArfield 2250
Cleveland, Ohio	CHerry 1-7600
Columbus, Ohio	MAin 5527
Dallas, Texas	Riverside 5231
Davenport, Iowa	3-2761
Denver, Colorado	KEYstone 8121
Des Moines, Iowa	2-0244
Detroit, Michigan	TErinity 2-7010
El Paso, Texas	2-5691
Fresno, California	4-5057
Grand Rapids, Michigan	9-3105
Houston, Texas	CHarter 4691
Huntington, W. Virginia	7146
Indianapolis, Indiana	MArket 3301
Jackson, Michigan	2-0519
Kansas City, Missouri	MArrison 7122
Louisville, Kentucky	CLay 0212
Memphis, Tennessee	8-8546
Milwaukee, Wisconsin	BROodway 6-1800
Minneapolis, Minnesota	GRanville 3543
Newark, New Jersey	MArket 2-0200
New Orleans, Louisiana	RAYmond 8656
Norfolk, Virginia	5-1639
Omaha, Nebraska	ATLantic 7793
Philadelphia, Pennsylvania	EVERgreen 2-1200
Phoenix, Arizona	ALPine 4-3158
Pittsburgh, Pennsylvania	ATLantic 1-8400
Portland, Oregon	CApital 1-9151
Providence, Rhode Island	GAAspe 1-0818
Richmond, Virginia	2-4758
Roanoke, Virginia	6263
St. Louis, Missouri	CEntral 1-1120
Salt Lake City, Utah	5-3413
San Diego, California	FRanklin 8151
San Francisco, California	EXbrook 2-5353
Seattle, Washington	MAin 0808
Spartanburg, South Carolina	7652
Spokane, Washington	EMpire 3371
Springfield, Massachusetts	6-8373
Syracuse, New York	2-1361
Talade, Ohio	GArfield 4625
Tulsa, Oklahoma	3-3191
Utica, New York	4-1194
Washington, Dist. of Col.	NATIONAL 8-8843
Wilkes-Barre, Pennsylvania	3-1144
Youngstown, Ohio	4-1118





ENGINEERING  
REPORTS



**"PRODUCTION INSURANCE"** for the *Houston Post's* giant new press is provided by individual G-E drive motors—totalling 900 hp—for each of its 15 press units and 3 folders. Should as many as  $\frac{1}{3}$  of the motors be lost from the press combination, those remaining could still carry the whole load at almost normal speed.

# Simple, flexible G-E electronic press drive powers Houston Post's new Goss press

Factory-assembled equipment and elimination of most moving parts cut installation and maintenance costs in new \$4,000,000 plant

The heart of the Houston *Post's* new \$4,000,000 plant—opened in January, 1955, on the newspaper's 70th anniversary—is its giant new Goss Headliner press, powered by a General Electric electronic press drive. Eighteen G-E motors drive its 15 units and 3 folders, geared to turn out 180,000 forty-page newspapers per hour.

Many reasons prompted the *Post* to specify this G-E "printing press drive of the future," among them:

**Lower installation costs**—approximately 15 per cent less than conventional drives—because of modern-designed and factory-assembled-and-wired control panels.

**Lower maintenance costs.** With the simple, easily understood and industrially accepted components

of this electronic system, most moving and wearing parts are eliminated.

**Increased flexibility** for various press combinations because threading and running power for each unit comes from its individual drive motor.

**Fewer web breaks** due to the drive's smooth, stepless speed control.

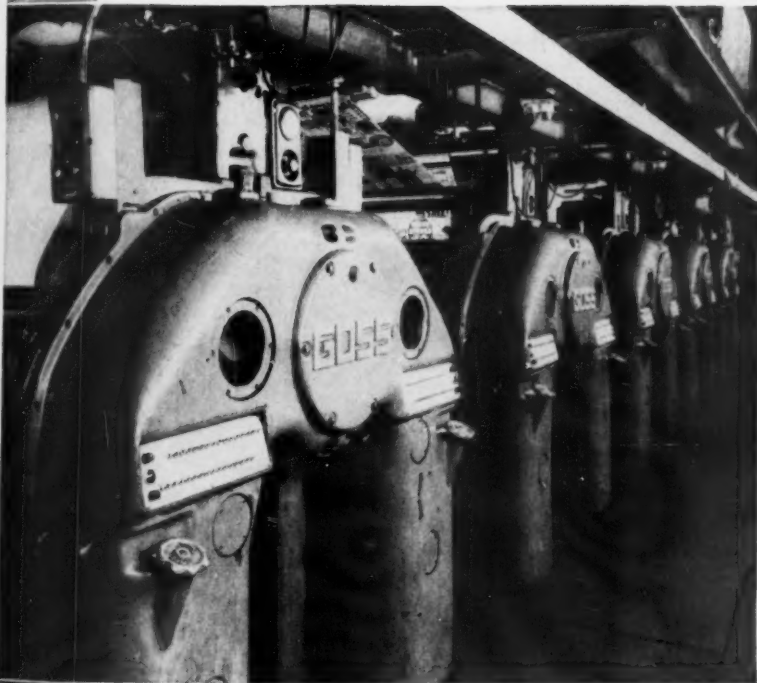
**Savings in power cost** because of the higher overall efficiency and power factor of electronic drive that result from absence of secondary resistors.

**Greater headroom** in the reel room, since motors are mounted on the side frame of the press.

For full information on the G-E electronic press drive, contact your nearest G-E Apparatus Sales Office, or write for Bulletin GEA-5523 to General Electric Co., Section 653-36, Schenectady 5, N. Y.

Engineered Electrical Systems for Newspaper Plants

GENERAL  ELECTRIC



**FINGER-TIP CONTROL** with G-E Safety Signal System is another feature. G-E push-button stations are conveniently mounted at various locations on the press for quick accessibility and maximum safety to the pressman.



**FULLY AUTOMATIC PANEL** combines power and control circuits for the d-c drive motors in this compact row of cubicles. For any future plant expansion, matching cubicles can easily be added.



Linecasting machine operators are sold because they "see what they set" without eyestrain. Publishers and printers stay sold because Matrix Contrast eliminates 25% of all errors in linecasting machine composition.

Matrix Contrast Corporation has been in successful operation for over 25 years, and today services leading publications from coast-to-coast through 6 conveniently located service branches and 31 trained service crews. The Matrix Contrast method is the time-tested system of processing your matrices in Black and White or Colors in your plant without interrupting your regular production schedules.

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Ferd Mier, Stereotype Supt., Detroit Free Press, discusses structure of printing surface of stereotype plate.



## Stereotype Metal Structure and Cooling — Their Effect on Long Run Printing Plates

By FERD MIER\*

\*Stereotype Supt., The Detroit Free Press.

**T**WENTY years ago American stereotypers were indirectly criticized by a group of English metallurgists. Their implication of our ineptitude in securing optimum results and what they felt was proper crystalline structure in curved stereotype plates are as pertinent today as they were then.

The studies of the International Tin Research and Development Council as it was known prior to World War II and the investigations of type metals by Frances Weaver in 1934, showing the basic structural pattern of type metal, has been beneficial to English platemakers for a considerable time.

Basically, stereotype metal formulas in England contain slightly higher percentages of tin and antimony. The formulas

in general use for the casting of curved newspaper plates in the United States will perform equally as well under controlled conditions.

The lack of study on our part concerning one of the most important materials with which we work is little short of amazing. The general belief that taking a metal sample periodically and letting the supplier provide toning metal to maintain a formula has been about the extent of our efforts. Little thought has been given to exactly what type metal is and how it works in the individual plant.

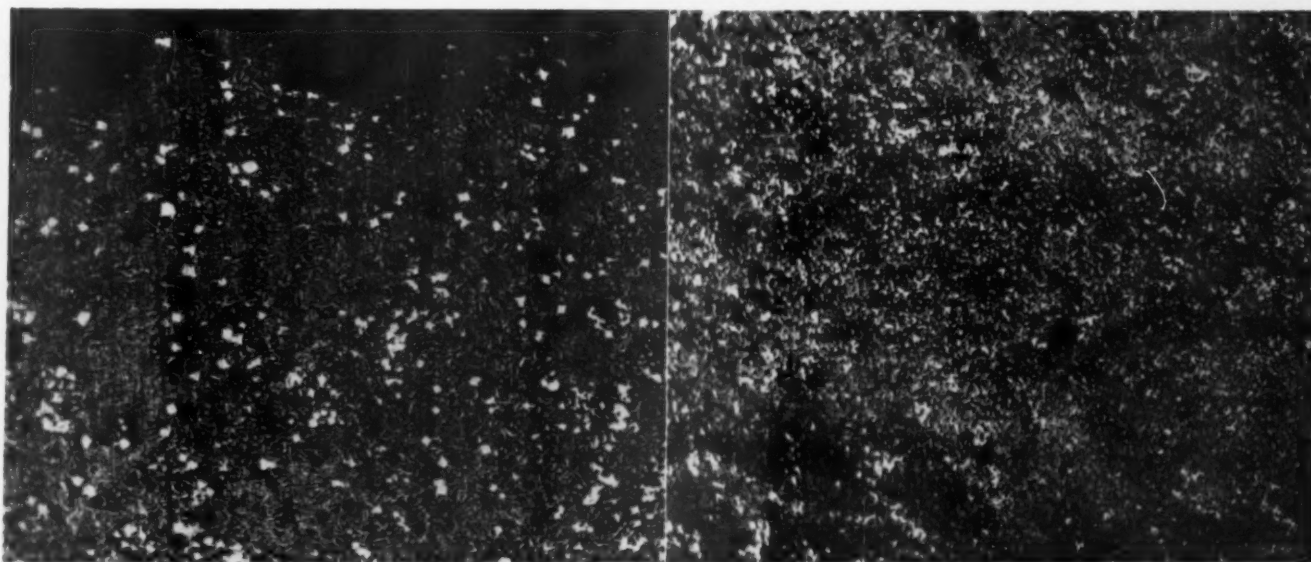
Exactly what is type metal? Everyone knows the answer to that. Lead, tin, and antimony. This seems to be the end of our knowledge.

Let us take a broader look at type metal, stereotype metal in particular. It is a ternary eutectic alloy having a eutectic composition of 12% antimony, 4% tin, and 84% lead. But that is not your formula for stereotype metal. True it is not. It is only the basis for stereotype metal. To this eutectic alloy we add 2% antimony and 2% tin and therein lies our problem.

### Dr. Jekyll and Mr. Hyde

We immediately create a brand new personality; one that under most conditions has all the traits of a Dr. Jekyll and Mr. Hyde.

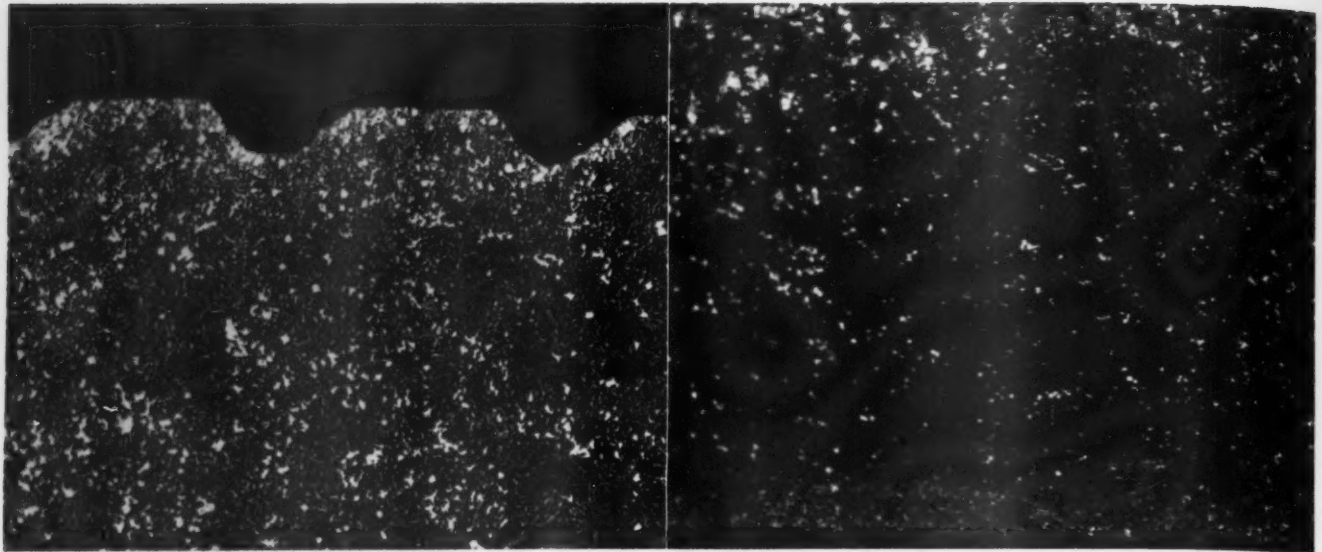
We now have two ternary systems as well as the eutectic matrix in which they



**Fig. 1.**—Microphotographs (Magnification: 100X) of face and back of stereotype plate showing poor crystalline structure. At the left, the face of the plate is composed of eutectic matrix and irregular shaped crystals of tin and antimony compound. This type of structure usually results from high temperatures on the jacket of the casting box.

Back of the same plate (right) showing high crystalline structure of tin and antimony compounds in eutectic matrix. The back of the plate is extremely hard and abrasion resistant.

This plate sample was cast with a jacket temperature of 140 deg. F. and a cylinder temperature of 85 deg. F.



**Fig. 2.**—Microphotographs (Magnification: 100X) of surface (left) and back (right) of abrasion resistant plate showing crystalline structure preferred at the Detroit *Free Press*. Plates having crystalline structures of this type have printed 140,000 impressions per plate without showing appreciable wear or unsatisfactory reproductions of halftones or type.

The white square crystals at the surface of the plate are com-

posed of a tin and antimony compound that is extremely hard and highly resistant to abrasion; these crystals are embedded in the eutectic mass which itself is abrasion resistant.

The back of the plate shows the effect of a high cylinder temperature (160 deg. F.) and is a much softer alloy than is present on the face of the plate; jacket temperature was maintained at 80 deg. F.

are embedded. The Dr. Jekyll side of this personality is composed of lead, antimony, and an antimony tin compound. This side of the split personality we call stereotype metal yields a smooth cuboid crystal that is embedded in the eutectic and gives your plate long wearing and excellent reproductive qualities. To maintain such a type metal personality requires a lot of pampering and attention. Heat must be applied circumspectly. Dr. Jekyll cannot run too high a temperature. In fact he insists upon being chilled rapidly and abhors insulation. His normal temperature rarely exceeds 575 deg. F. and is much healthier at 550 deg.

#### Mr. Hyde is Decrepit Bum

Raise his normal operating temperature and Mr. Hyde emerges before you are aware of the change. He presents himself as an unshaven individual with a straggly, irregular crystalline shape, much like a decrepit bum. His resistance to wear is negligible. His makeup is composed of lead, tin, and a compound of antimony tin. This side of the personality causes replates due to premature wear on the press, a certain lack of ink receptivity of the plate surface, and, in general, poor reproduction.

If you do not know which type of crystalline structure you are obtaining may I recommend that you send a small section of a plate to your supplier and request photomicrographs and an interpretation of them by his metallurgists. A section 1 in. sq. taken from the center of the plate surface will be adequate for this purpose. Most of the type metal suppliers should be happy to make available this service to their customers.

#### Plate Surface—Long Life

The importance of proper crystalline structure to the stereotyper and pressman

lies in the fact that plate life can be materially extended or appreciably shortened by the type of structure obtained on the printing surface of the plate. We at the Detroit *Free Press* are constantly checking and making every endeavor to secure plates that will print acceptably on press runs of 120,000 impressions or more per collect press. This we feel we have accomplished under most conditions. We have had press runs calling for 560,000 copies (140,000 impressions per plate) where the plates have never been changed and the final copies were as acceptable to the advertiser as the first copies on the run.

#### Stipulated Conditions

Operations of this type call for constant maintenance of press equipment and stereotype equipment. It presupposes

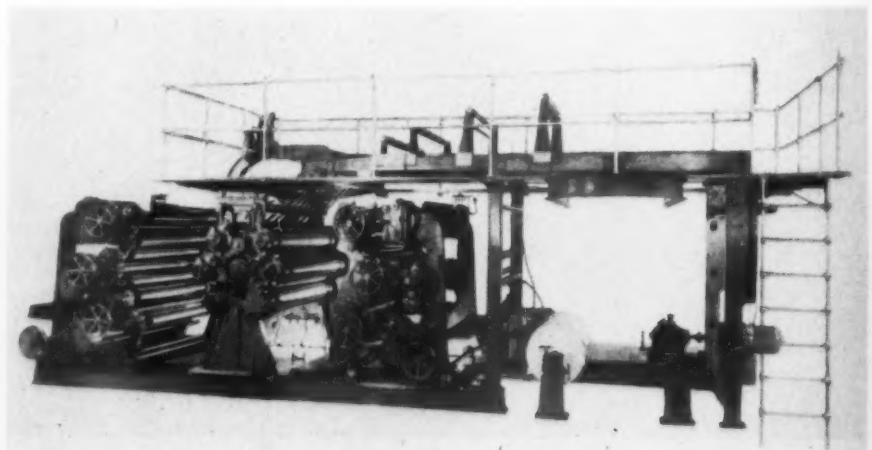
material in the form are up to established standards for halftone depth and that type in the page is solid and accurate.

Press form rollers must be properly adjusted and preloaded bearing plate and impression cylinders are almost a necessity.

#### Control of Abrasive Action on Plate

Plate wear as such is normally due to abrasive action. Many materials have an abrasive effect on the face of the plate. Rollers, ink, impression setting and method of packing the impression cylinder all play a part. Peripheral dimensions of the plate and impression cylinder are of extreme importance. Care and study of these factors will increase plate life whether or not you obtain the best crystalline structure on the plate surface.

(Continued on Page 49)



**Second Six-Color Press**—Kalamazoo (Mich.) Vegetable Parchment Co. recently installed a new Cottrell six-color label letterpress for high speed label and wrap printing. It is KVP's second Cottrell six-color press. The press prints at web speeds in excess of 800 ft. per min. A horsehoe tram-rail shown above feed and delivery bay facilitates removing or installing new rolls.



# Century Old Textile Mill Building Now Houses a Modern Printing Plant

**I**N March 1954, William B. Roberts, president of the Excelsior Printing Co., North Adams, Mass., announced that his company had purchased a century-old woolen mill building. North Adams is a small industrial community situated in the northwestern corner of the state. Roberts outlined plans for transforming the structure to house his printing plant and the unoccupied space would be leased for industrial operations.

This announcement was indicative that the Excelsior company was continuing its growth of the post war years. It also showed that other industry was willing to take over manufacturing space made available by a segment of the departed textile industry.

This taking up of an existing manufacturing building forms another chapter in the Excelsior Printing Co.'s history which dates back to its establishment in 1897 by Mr. Robert's father. Part of this story was told in the March 1951 issue of *Printing Equipment Engineer* when the company had pursued a five year program of plant expansion and equipment modernization.

## Physical Limits Dictate Change

Not unlike many other American printing businesses, the story didn't end

in 1951. It wasn't so long after this that the physical limits of the then present building were reached.

This well equipped printing firm is housed in a renovated 100 year old structure. It is now able, with 30,000 sq. ft. of operating space, to flex its muscles and do a gross business which reached the \$1½ million mark in 1954. The company expects to increase that figure to \$600 thousand in the current year.

## Revamping An Old Mill

All of this has been no small task, especially the planning behind the revamping of an old mill to meet requirements for successful operation. Attention had to be given to the layout of the plant, equipment location, floors, lighting, windows, heating, elevator, landscaping the grounds, razing adjacent buildings no longer required and other changes necessary to make the building safe and comfortable.

Describing the alterations, Roberts said a new automatic elevator was installed for vertical movement of materials within the building. An outside fireproof shaft to house the elevator was constructed adjacent to the building's old elevator shaft. New delivery and loading platforms to accommodate a variety of

trucks, and entrances for employees and office workers were also built.

A new oil heating system was installed, while the old hand fired boilers were removed. The old boiler room and adjacent buildings were torn down.

## Changed Inside and Out

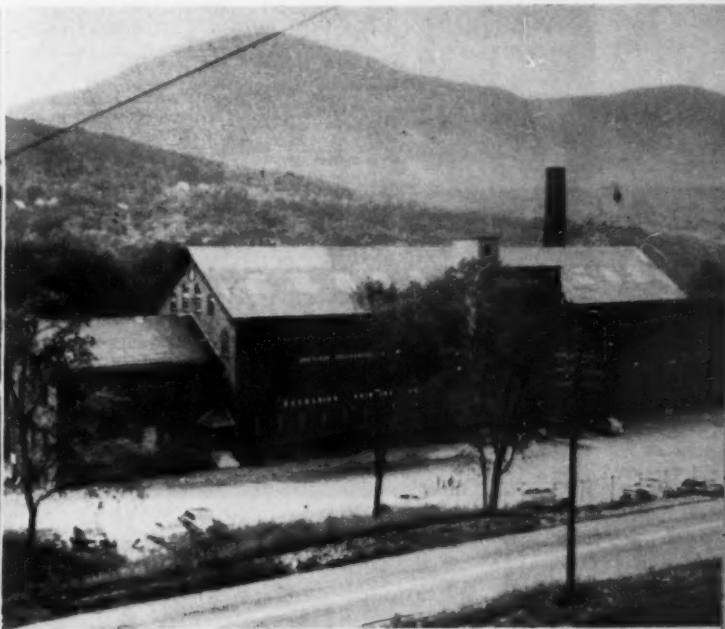
Outside landscaping changes were extensive. In mid-March the premises had the abandoned appearance of many other vacated New England textile mills. Dead and unattractive trees and scrub weed were cut down and removed. A raceway entering the building from the front, through which water from the nearby Hoosac River was diverted into the building, was filled in. The tailrace behind the building was covered and new sewer lines were installed.

The outside changes also included the addition of a circular driveway with approaches for loading platforms and office entrances. Attractive trees, shrubs and lawn were planted to beautify the surroundings.

Among the major safety features were the installation of crash doors for fire escape use. Additional fire hydrants for protection of the building were also installed on the grounds. As a result of these safety additions, Roberts revealed there

**Before**—Littered and untidy, this was the scene in 1954 as workmen commenced repairs and alterations on a 100 year old former woolen mill in North Adams, Mass., prior to occupancy by the Excelsior Printing Co. Unattractive trees were cut down and scraggly brush was cleared away. Sloping area in front was filled in and leveled for parking lot. Mill raceway in left foreground.

**After**—The same building as it looks today. Landscaping of the grounds has been completed and an adequate parking lot for employees and customers is provided. The new elevator shaft rises above the trees in the center foreground. At left is the main entrance to the plant where formerly a water raceway existed. The view in the background is part of the Greylock mountain range.







Hand composition department in composing room of Excelsior Printing Co., North Adams, Mass. Note newly laid floor and ample fluorescent lighting.



Monotype Caster department in plant of Excelsior Printing Co., North Adams, Mass. The Monotype equipment consists of two keyboards, two casters and one Material Maker. The exhaust hood arrangement draws off melting pot fumes. When this picture was taken, the sun was shining on the impressively clean floor.



Six Miehle Vertical Presses have been placed in two opposing rows in plant of Excelsior Printing Co., North Adams, Mass., with 20 ft. long work table between. The presses are operated by a crew of four men. See accompanying story in which is explained how maximum production is secured.



View of cutter department, Excelsior Printing Co., North Adams, Mass. Here three cutters are placed in line and continuous tables are provided between cutters. In this way, on large quantity work where three side trimming is required, two cutters are adjusted for progressive cuts. The man taking the first top and bottom trim passes the lift to the next cutter. In turn, the two-side trimmed lift is passed along to the third cutter. Books, pamphlets, publications and the like are trimmed in fast order.

was a substantial drop in the company's insurance rates.

### Move Was Rapid

Besides the above mentioned physical changes, the equipment was moved, installed and the plant was in complete operation in approx. 3½ months' time. The actual planning operation for the move consumed 6 mos. The principal production machinery was moved while the plant was closed for a one week vacation period in early July, 1954. Production operations commenced again at the end of the employee vacation period.

On the assumption that readers of *Printing Equipment Engineer* generally are more interested in the unusual expansion plans of other printing plants, we have avoided until now a description of the Excelsior Printing Co. and the interesting features of its operation. The firm is now set up for doing general letterpress and offset commercial printing.

### Engraving Plant Increases Versatility

In this connection, the Greylock Photoengraving Co. moved into the building housing the Excelsior company. It occupies approx. 6000 sq. ft. on the second floor with equipment for producing letterpress and offset printing plates. To work in conjunction, Roberts had added an art department. He says that with the combination of his printing operation and the Greylock firm, it is now possible to offer one of the best equipped printing plants in Western Massachusetts.

Excelsior is a typical commercial printing plant producing a variety of work. Among its products are advertising pieces, catalogs, booklets, office forms, school bulletins, labels, town reports, etc. The amount of color work run on the plant's presses has increased substantially since 1951 with the acquiring of more advertising agency business. In addition to large customers in that section of Massachusetts, the company's markets extend into the large New England cities as well as into the tri-city area of Albany, Schenectady and Troy, N. Y.

Sixty-two employees man the mechanical departments, shipping room and offices. Production in the plant is supervised by Plant Supt. Guy Weston. Other key men in the Excelsior organization include Irving Rollins and William Daniels, pressroom foremen.

### Attention to Floors, Lighting and Color Scheme

Before company occupancy, it was necessary to do considerable work on the plant interior. The wood floors had to be resurfaced with filler compound and sanded down. Broken and loose windows were replaced. The obsolete lighting fixtures in the production departments were replaced with 260 fluorescent 3 ft. fixtures for proper illumination. Wiring and plumbing were altered and replaced where necessary.

Walls and ceilings were included in the renovation program, too. Green was

chosen as the color for the walls in combination with white ceilings. A color scheme for quick identification of pipes in the plant was also used. The scheme is as follows: Water pipes in black, gas pipes in green and water sprinkler pipes in red. All production machinery has been painted gray to conform to the adopted color code.

The Excelsior plant is arranged so that business and sales offices, production and art departments, machine composition room, composing room, proof room, letterpress pressroom, bindery, shipping and lunch room are all located on the ground floor. Half of the second floor is used for stock storage and the offset pressroom. The remaining half is occupied by the Greylock platemaking firm. Other small industries now occupy the balance of the building space in which is included a basement, third and fourth floors.

Production improvements are expected advantages in the move of a printing plant into new and larger quarters. Some of the increase comes as the result of the faster, modern equipment added to replace slow, worn out machinery which is normally installed when a company changes location. Expanded areas, new environment and different location of departments, doors, windows, utilities, etc., also make possible better arrangement and work simplification ideas. The move acts as an incentive to company personnel to offer ideas on how production should be handled.

## Proof Signal System

AT Excelsior Printing Co. several refinements in production procedure are being tried. One is a proof signal system designed primarily to conserve the pressman's time and to provide better coordination between the proofreaders' room and pressroom.

It is the practice in this plant for the pressman to bring the first proof taken immediately after the form is locked on the press to the proofroom for a final check for errors. On small jobs he might find it expedient to wait for his OK, while on larger jobs he might be required to make one or more unnecessary trips to the proofreader before the OK is released.

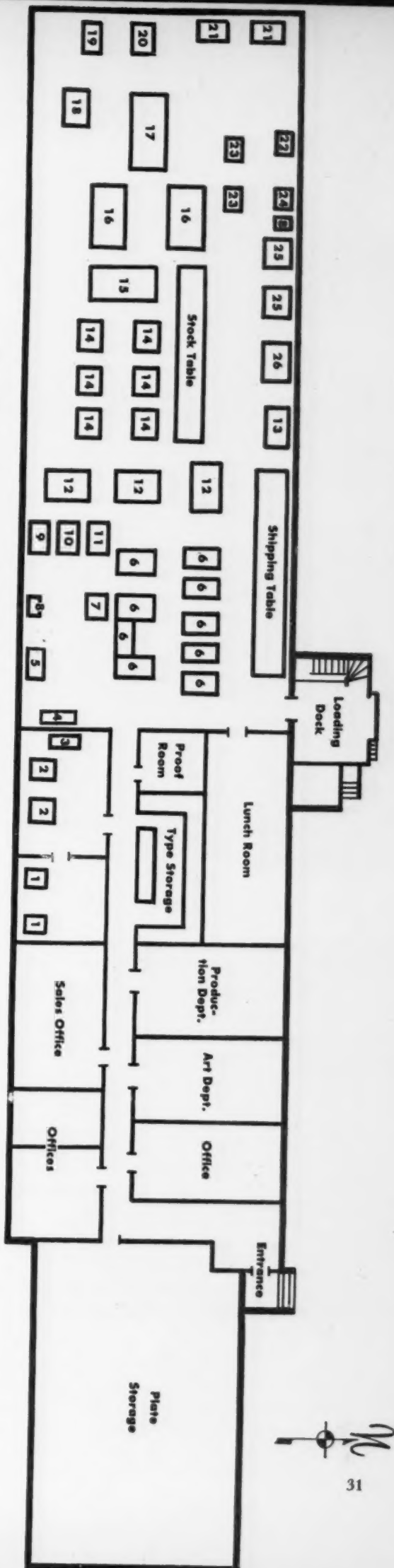
In use is a signal light system to relay word to the pressman that his proof OK is ready. It is controlled by the proofreader from a central switchboard located in the proofroom. A signal light is to be placed at each press which will be illuminated after the OK has been affixed to the proof as an indication that the pressman can now come to the proofroom for his proof. After bringing the first proof to the proofreader, the pressman returns to his machine and proceeds with make-ready operations. It is believed the system will save considerable wasted motion.

(Continued on Page 31)

(In the preparation of this layout, President Roberts states the Hamilton Mfg. Co. and the American Typefounders Kits were helpful.)

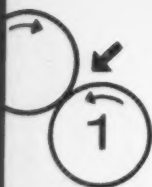
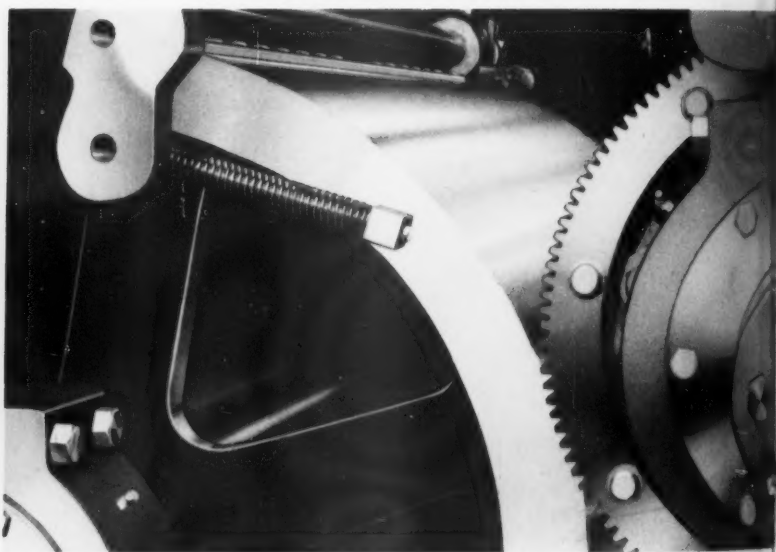
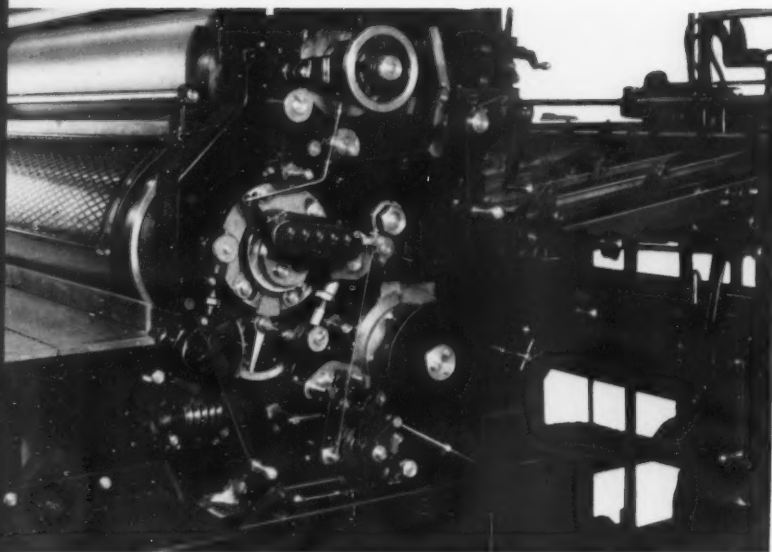
**First Floor Equipment Layout Diagram, Excelsior Printing Co., North Adams, Mass.**

- |                            |                              |                                      |   |  |                           |
|----------------------------|------------------------------|--------------------------------------|---|--|---------------------------|
| 1—Monotype Keyboards       | 6—Type Cases                 | 11—Heidelberg 10 in. by 15 in. press | 15—Miehle Horizontal 22 in. by 28 in. press | 18—Baum Senior Folder 17 1/2 in. by 22 1/2 in. | 21—Perforators            |
| 2—Monotype Casting Machine | 7—Saw Trimmer                | 12—Job Press 10 in. by 15 in.        | 16—ATF Kelly Three 25 in. by 37 in. presses | 19—Muhilith 9 3/4 in. by 14 in. press          | 22—Punching Machine       |
| 3—Monotype Rule Caster     | 8—Drinking Fountains         | 10—Kluge 12 in. by 18 in. press      | 13—Lineup Tables                            | 20—Miehle Lithoprint 14 in. by 20 in. presses  | 23—Slicers                |
| 4—Proof Press              | 9—Job Press 10 in. by 15 in. |                                      | 14—Miehle Vertical 14 in. by 20 in. presses | 17—Cleveland Folder 25 in. by 38 in.           | 24—Paper Drill            |
| 5—Remelt Furnace           |                              |                                      |   |  | 25—Seybold 34 in. Cutters |
|                            |                              |                                      |   |  | 25—Seybold 40 in. Cutter  |





Harris model 245A two-color 35 x 45" offset lithographic press



#### Individual Impression Cylinders

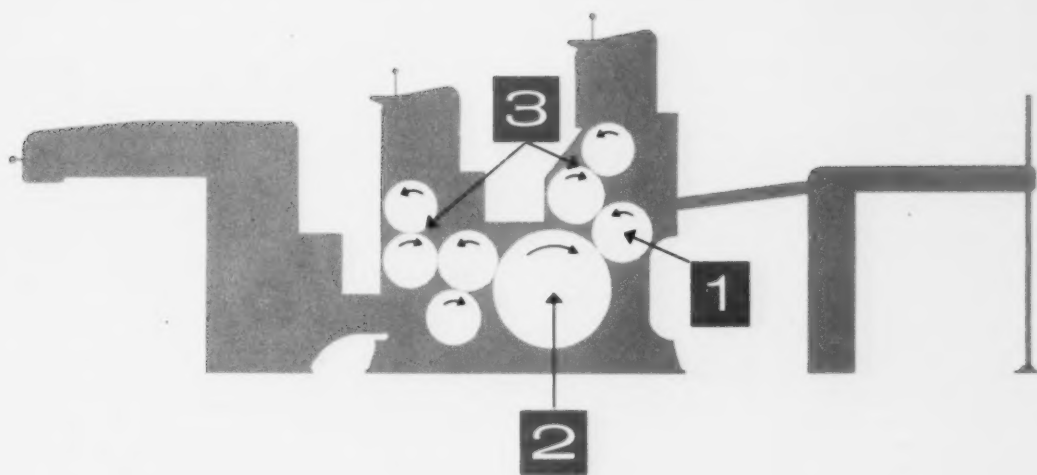
Each blanket cylinder on a Harris prints against its own individual impression cylinder. You get easy access to all cylinders in a normal working position, without moving precision-located large mechanisms.



#### Double-size Transfer Cylinder

Because Harris transfer cylinders are twice the diameter of impression cylinders, they rotate at half the speed. Sheets are gripped firmly once, then transferred. Ink has time for initial setting between colors.

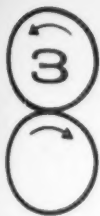
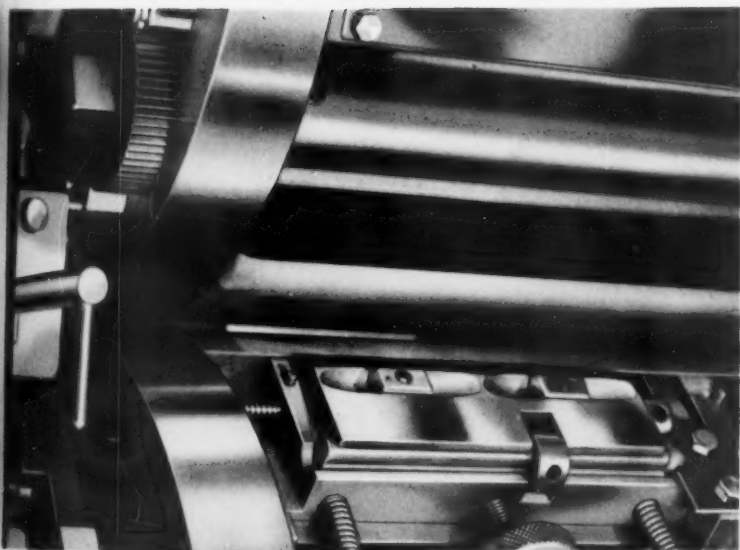




**Harris is the only offset press with  
all three of these accepted printing features**

The basic design of a Harris multi-color gives you a combination of three features accepted by successful lithographers as essential to good offset printing. They are: 1. Individual impression cylinders. 2. Double-size transfer cylinder. 3. Cylinder bearers. Only a

Harris has all three. They work smoothly together to give you the best multi-color printing you can get from an offset press. They help explain why three out of four multi-color presses installed by American lithographers since World War II have been Harris.



**Bearers for Better Print Transfer**

Hardened steel bearers on plate and blanket cylinders assure you of an always-constant distance between cylinder centers. Press wear, deflection and overpacking are less critical. Send coupon for technical article.

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Press Size	No. of Color Units			
	1	2	4	5
14 x 20"				
17 x 22"				
21 x 28"				
22 x 34"				
25 x 38"				
35 x 45"				
42 x 58"				
50 x 72"				
52 x 76"				

Please send me more information on the Harris offset press model (s) checked

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Street \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_

State \_\_\_\_\_

Please send me your technical article on printing from bearers

(Continued from Page 31)

### Considerable New Equipment

New equipment has been added and obsolete equipment replaced in keeping with the company's expanding production quotas. The composing room has been equipped with another Monotype Type Caster, Nolan Type Metal Remelting Furnace, two Hamilton Double-Frame Type Case Cabinets, Foster Galley Cabinets, Wild & Stevens Composition Table, and an Ellis Makeup Table and Galleys.

Installation of the following new equipment has been made in the pressroom: Two ATF Kelly 3 Cylinder Presses, Miehle No. 36 Single Color Offset Press, Miehle No. 29 Single Color Offset Press, 14 in. by 20 in. Miehle Lithoprint Press, 10 in. by 15 in. Heidelberg Automatic Platen Press, ATF Aqua-trol Moisture Extracting Devices for offset presses, Gegenheimer Press Washer, Baldwin Water Levels and SESCO Non-Offset Gun. In the bindery has been added a 17½ in. by 22½ in. Baum Folding Machine and an Acme-Morrison Sticher.

## Presses Run By Teamwork

**T**HE belief that teamwork is the means for faster accomplishment is evidenced by two of the operations in the Excelsior plant. One is in the pressroom where six Miehle V-50 Vertical automatic cylinder presses are kept busy producing a variety of work. Here, two pressmen have been assigned to every three Verticals.

These two-man teams are trained to watch color and register, and assist one another in getting a press under way during job changeovers. They work as a cooperative unit on any press requiring attention.

Should two presses be running on jobs, a team is able to get the third press in production in minimum time. Should two presses be down, a pressman is available for working on each press, the one finishing first then able to assist the other. The team is also able to provide two approaches on how to handle diversified work. The two-man team idea may not be new, but Excelsior is finding it works well in many respects.

### V-50 Arrangement is Beneficial

Arrangement of the Vertical presses in the new plant is another assist to these pressroom teams. They are positioned in two rows of three presses each with the delivery ends facing a specially constructed table which runs the entire length of the immediate area behind the presses. The 30 in. wide by 20 ft. long table is used for temporarily storing printed sheets from the presses. Aisles wide enough through which a single platform skid may be brought on a truck are located on either side of the table.

When a lift of sheets is removed from the delivery hopper of a press, the pressman makes a half turn and places his load on top of the table. It enables a pressman to quickly empty the press delivery table and start running again with minimum downtime. When a job is completed, a platform skid can be wheeled in next to the table and the entire order removed from the table in one operation. Three shelves have been constructed below the table top for storage of ink cans and tympan paper.

## Movable Bindery Tables

**B**INDERY operations in the previous plant proved the fallacy of working from bindery tables which were impractical for movement within the department, according to Roberts. Their weight and size made these tables practically a fixed installation. Excelsior has found a substitute for this cumbersome equipment by use of a number of Monroe Pedestal Folding Tables.

The working area of each table is 3 ft. by 8 ft., with a Masonite table surface and collapsible metal legs. They are used in the bindery primarily for handling the folded signatures produced on a 25 in. by 38 in. MS Cleveland Folding Machine and a new 17½ in. by 22½ in. Baum Folding Machine. The tables are set up in the area adjacent to the folder, the number depending upon the size of the job. Afterward, they can be folded quickly and put aside. The floor area can then be used for other purposes. This suggests that other plants can employ the idea profitably even with ample flooring.

### Tables Have Many Uses

Their size and light weight permits handling each table by one person, making possible movement of a table to any part of the bindery or, for that matter, any point in the plant where a table is temporarily required. Excelsior em-

ployees use them for hand gathering operations, for work benches where hand work is required, for accommodating stock in practically every finishing operation in the bindery, as utility tables in cutting and shipping operations, and even in the pressroom for temporary stock storage purposes on small jobs.

The portable feature also permits any desired arrangement of the folding tables. They may be placed alongside one another, end to end, at right angles or spaced apart with narrow aisles between.

## Cutters Work in Unison

**T**HE two-man team idea is used again in the Excelsior operation—this time in the bindery. Here, two 34 in. Seybold paper cutters have been placed side-by-side and connected with a 12 in. wide by 7 ft. long metal working top extension running from the working area on one cutter to that on the other.

Because the firm does such a large amount of booklet-type work (catalogs, annuals, reports, etc.) requiring a three-sided trimming operation, it was decided to have the two paper trimmers work together as a unit on the same job. The operator of the first cutter removes a lift of bound booklets from a skid and trims the top and bottom edges. He then slides the lift along the extension table top where it can be grasped by the operator of the second cutting machine. The side trim of the booklet is made on this cutter and the lift is placed on a skid for the shipping department, completing the operation.

Roberts had the accessory working top extension made to his own specifications. Experience with the two cutters working in unison on the same job has proved that better time can be made on the trimming operation. It reduces changing the settings of the back gauge and results in less handling of the lifts of booklets. Preliminary planning in this instance is paying off in production dividends.

These portable Monroe Pedestal Folding Tables are used in Excelsior Printing Co.'s bindery as well as other departments when occasion arises. In the bindery they are used right next to folding machines and may be stored temporarily when not in use.



PRINTING EQUIPMENT *Engineer* — May 1955

## Effect of Automation: Production Costs Down—Maintenance Costs Up

**I**N CONNECTION with the Western Plant Maintenance and Engineering Show, *Printing Equipment Engineer* received recently a promotional article. While the context of the article is related directly to industry in general, we are passing along to our readers some of the comment. Some of the effects inevitably will "rub off" on the printing industry. One phase of the possible effect of automation is that as production costs go down, maintenance and service costs will rise. This is an angle which has not been pursued too thoroughly by many printing executives. There is substantial proof that automation will ruthlessly wipe out many rank and file workers' jobs, but also will be the means for creating many high level maintenance situations.

"The fastest growing cost in modern manufacturing is the cost of plant maintenance," according to R. J. Meidel, president of the California Mfrs. Assoc. and president of United Can and Glass Co., Hayward, Calif.

He said in urging the 1000 California member firms to participate in the Second Western Plant Maintenance and Engineering Show, Los Angeles, July 12-14: "U. S. industry this year will lay out almost \$14 billion in total maintenance costs. This is over twice the amount expended annually 15 years ago,

and many experts believe the rapid acceleration of automation in industry will mean that today's maintenance spending will be doubled within 10 years.

"These men recognize the clear trend of industry toward increased maintenance needs. In several estimates it has been pointed out that within the next five years the country's labor force will be increased by from 7 to 10 million workers.

"As automation makes deeper inroads in America's plants and factories, the amount of time and money devoted to maintenance will go up proportionately. How close that day may be can be judged by an official statement released this year by the National Association of Manufacturers: 'The automatic factory is not merely coming. It is already here'.

"The key to this new emphasis on maintenance engineering is basically the changing pattern of production costs. Though mechanization and automation are replacing on-the-line workers, they are not in the true sense of the word creating automatic factories. As Benjamin F. Fairless, president of U. S. Steel, has said, 'There are no such factories'. Men must still put the thinking into these new machines, and men must service them and keep them going. Thus, as the cost of production goes down, the cost of maintenance and service will rise."



SZEL

SEARLE

BETLOCK

CLAWSON

### Miller Organizes European Subsidiaries

Miller Printing Machinery Co., Sub. of Commercial Credit Co., recently announced the formation of two European subsidiaries. The new subsidiaries, which will manufacture and sell Miller letterpresses in Europe, announced R. B. Tullis, president of Miller, are Miller Printing Machinery Ltd., London, Eng., and Miller Druckmaschinen A. G., Chur, Switzerland. John H. Szel, who has been named a director of the European subsidiaries, will head sales activities and act as export manager of the American-built Miller offset and letterpresses outside of the U. S., its possessions, and Canada. His headquarters will be in Zug, Switzerland.

As a further expansion of the Miller foreign sales activities, President Tullis said, an arrangement has been made, effective June 1, 1955, whereby the Miller Printing Machinery Co. will be licensed to manufacture in Europe and distribute Vandercook proof presses, test presses, block levellers, gauges and other pre-press equipment in all countries excepting the United States and Canada.

Tullis also announced that the domestic sales setup is being expanded to move sales management closer to New York, N. Y., and Chicago. Under the plan, Miller Director and Vice Pres. A. E. Searle, jr., will be in charge of the Eastern market comprising the area east of Cleveland, including

Eastern Canada, and will have his offices in the McGraw-Hill Building in New York, N. Y. F. G. Betlock, who has been appointed a vice president, will be in charge of the Western division which will include the remainder of the United States and Western Canada, and will have his offices in the Daily News Building, Chicago. Tullis also announced the organization of a new marketing department with headquarters in Pittsburgh, Pa. W. T. Clawson, the present advertising manager, will direct this department. H. T. Eckhardt will be advertising manager. J. K. Kerr, advertising manager of the Miller subsidiary, the Kerotest Mfg. Co., will assume the duties of sales promotion manager, and D. W. Richards, who has been compiling service manuals, will be advertising production manager.

### Vandercook Equipment Manufactured by Miller

E. O. Vandercook, president of Vandercook & Sons, Inc., recently announced that the Miller Printing Machinery Co. will be licensed to manufacture and distribute Vandercook equipment in all countries excepting the United States and Canada, effective June 1, 1955. President Vandercook stated that the arrangement with Miller solves the problem of supplying Vandercook equipment in many foreign countries. The Miller organization main-

tains a manufacturing standard that is comparable to Vandercook's, continued Vandercook, and this is assurance that the equipment manufactured by Miller in Europe will be of the same quality as in the United States. Vandercook also stated that through Miller his company will be able to make available more quickly to the Graphic Arts industries in other countries new developments and equipment as may be produced from time to time.

According to R. B. Tullis, president of Miller Printing Machinery Co., "This manufacturing and sales affiliation with Vandercook is a further expansion of our foreign sales activity. It is a welcome association, for it will enable us to more completely advance the best interests of letterpress printers throughout the world by making available to them the Pre-Press Equipment developed by Vandercook. . ."

The Vandercook Pre-Press Equipment that will be manufactured by Miller in Europe will include Vandercook Proof Presses, Test Presses, Block Leveller, Gauges and other Pre-Press Equipment in the Vandercook line.

\$3000

IN PRIZES

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## Graphic Arts Equipment and Supplies

# Literature for the Asking

**Keep Yourself Informed.** The folders and bulletins listed below all pertain to modern equipment, supplies, processes and/or methods. These have been prepared especially for plant managers, superintendents and foremen. Please ask for the pieces selected by number and send your request to Literature Dept., *Printing Equipment Engineer*, 1276 West Third St., Cleveland 13, Ohio.

### Composing Room

#### LINECASTING MACHINE BULLETINS

A method for cleaning molds on linecasting machines, known as Penrate, is the subject of a four page bulletin issued by Intertype Corporation. Another bulletin provides tips on saving matrix toes through use of the improved Intertype first-elevator lever link. Both bulletins are printed in two colors and each measures 3½ in. by 6¼ in. Please mention PEE No. 231L when requesting copies.

#### STAR QUADDER BULLETIN

Linotype Parts Co., Inc., offers a letterhead size, 8 page bulletin on its new Model Star Selectro Matic Quadder. Contained in the bulletin is detailed information on the mechanical and automatic features which provide quadding action. For a copy, please mention PEE No. 232L in your request.

#### No. 22 GALLEY PROOF PRESS

Four page illustrated folder, letterhead size, released by Vandercook & Sons, Inc., is devoted to a description of the Vandercook No. 22 Galley Proof Press. Driven by ¼ h.p. motor for 30 proofs per min. Bed size, 10 in. by 25½ in. For a copy please mention PEE No. 233L in your request.

#### NOLAN NEWSPAPER TURTLE (TRUCK)

Illustrated and described in a two page letterhead size leaf are the Nolan Corporation Newspaper Turtle (fixed height) as well as the company's Hydraulic Elevating Form

Truck in single and double pages sizes. Construction features are described. For a copy please mention PEE No. 234L in your request.

#### ROUSE PAGE FRAMES

Two page, letterhead size, illustrated bulletin in descriptive of Page Frames manufactured by H. B. Rouse & Co. Comparative costs as against string tieups is given. For a copy please mention PEE No. 235L in your request.

#### TYPE SPECIMEN

A new Linotype Monticello type specimen folder showing the range of point sizes is now available from Mergenthaler Linotype Co. The folder displays the complete Monticello series from 7 through 14 pt. inclusive. Monticello, classified as transitional in design, reproduces equally well by letterpress or offset and has good color, says the sponsor. Please mention PEE No. 260L when requesting a specimen folder.

#### LUDLOW BOOKLET

In Ludlow Typograph Co.'s booklet, *Some Reasons Why Printers Prefer Ludlow*, procedures and advantages of the Ludlow system of hand-set, slug-cast composition are explained. Information in a series of trade magazine advertisements included in the booklet give a well-illustrated Ludlow story. Please mention PEE No. 266L when requesting a copy.



### Platemaking

#### HEAVY DUTY PONY AUTOPLATE

To completely describe its new Heavy Duty Pony Auto-plate Stereotype Platecasting Machine, Wood Newspaper Machinery Corp. has prepared a six page bulletin with half-tones and diagrams. Folder consists of six pages. Various mechanical features are explained. For a copy please mention PEE No. 236L in your request.

#### PHOTOMECHANICAL HEAT GUN

The Mamco Heat Gun is illustrated and described in letterhead size bulletin sponsored by The Corkpak Co. The gun is used for drying film and opaquing in processing off-set and photoengraved plates. Can be used also for drying plates after lacquer applications. The gun is made in two models with varying and adjustable temperature ranges. For a copy please mention PEE No. 237L in your request.

#### CAPCO PLATE GAUGE

This gauge, states Capital Tool & Mfg. Co., is designed for checking thickness of standard curved stereotype plates, as well as tubular stereo plates and flat plates. The gauge is light in weight. Uniform gauging pressure is assured by

mechanical pressure. For a copy please mention PEE No. 238L in your request.

#### PLATE MOLDING PRESS

An article entitled *Choosing A Plate Molding Press*, published by Lake Erie Engineering Corp., is available. It includes parts on factors in press selection, press accuracy, correct press size, adequate pressure capacity, steam vs. electric heating and proper operating controls. Users of Lake Erie Acraplate presses are also listed in the letterhead size bulletin. Please mention PEE No. 239L when requesting a copy.

#### "REAL WORK HORSE"

A well illustrated booklet, 5½ in. by 8½ in., produced by C. B. Cottrell & Sons Co., is descriptive of Cottrell's flat plate solidifying and finishing machine. Company calls it a "real work horse." Please mention PEE No. 240L when requesting a copy.

#### MONOMELT SPECIFICATIONS

The recently effective Printing Plate Materials Specification and Price List No. 13 was released by the Monomelt Co., Inc. The four page bulletin is supplemented by a one page, two color insert describing MonoMatrix Board which is used in the production of molds for plastic and rubber plates. For a copy, please mention PEE No. 241L in your request.

#### GRAPHIC ARTS CATALOG

Eastman Kodak Co.'s new films—Kodalith Super Ortho, Kodalith Ortho PB (Polystyrene Base), and Kodak Auto-positive (Thin Base)—are listed in a revised catalog of all Kodak materials for the Graphic Arts industry. Photographic and physical characteristics of Kodak's Graphic Arts line of films, plates and papers are listed as well as data on chemicals needed for processing and the package size in which each is available. Please mention PEE No. 242L in your request for a copy of the catalog, *Kodak Materials for the Graphic Arts*.

#### PLASTIC PIPE

Properties of its rigid unplasticized polyvinyl chloride pipe are described in a four page pamphlet prepared by Easton Plastic Products Co., Inc. The pipe is corrosion resistant and light in weight (38.2 lbs. per hundred ft. in 1 in. size). It can be threaded and used with PVC fittings also sold by Easton. The pipe is made from B. F. Goodrich Geon material in both normal and high impact varieties. Please mention PEE No. 243L when requesting a copy.

#### GRAPHIC ARTS AIDS

The Craftint Mfg. Co. recently issued a 119 page catalog of shadings, symbols and alphabets to meet the demand for a unified and integrated program of paste-up patterns and alphabets. The booklet includes examples and patterns of the shading sheets, paste-up type, self-adhering clear plastic sheets, drawing paper with hidden tone, overlay film and doubletone drawing paper and tracing vellum. For a copy, please mention PEE No. 251L in your request.

#### OFFSET FACILITIES INSTALLATION

*Stepping Up Profitably in Offset*, an eight page illustrated booklet produced by American Type Founders, presents a simplified plan for installing an offset department. The three units needed are an offset press, printing frame and layout and stripping table. In the booklet an account of the operation of each unit is provided. For a copy, please mention PEE No. 252L in your request.

#### STAINLESS STEEL EQUIPMENT

P&H Sales Corp.'s new 16-page catalog contains information on its line of stainless steel sinks, trays, tanks and accessories. Free dark room layout also is offered by the company. Included in the catalog is information on Harvey Table-Type Rotary Continuous Matte Print Dryers in 18 in., 26 in., and 44 in. width capacities. Please mention PEE No. 257L when requesting the catalog.

#### MAGNESIUM MANUAL

Rolled Plate Metal Co. has revised its 40 plus page booklet on Zomag (magnesium for use by photoengravers). The material in the booklet includes the characteristics and usage of Zomag along with a history of the metal and where it has been applied. In a separate section, detailed processing in-

(Continued on Page 50)

### Literature Request Coupon

After you have selected the literature described in these pages which you would like to have sent to you, please jot down the identification numbers on this coupon and mail to

**PRINTING EQUIPMENT Engineer**  
1276 West Third St., Cleveland 13, Ohio

\_\_\_\_\_  
\_\_\_\_\_  
Your Company Name and Address

## Mid-Atlantic Conference Speakers Get Serious About Production Costs — Need of Equipment for R.o.p. Color

By STAFF WRITER

THE annual Mid-Atlantic Mechanical Conference was held at the Ambassador Hotel, Atlantic City, March 17 to 19 inclusive. Approx. 480 executives and manufacturer and supplier representatives attended. This conference is sponsored by the Pennsylvania Newspaper Publishers Assoc. and the New Jersey Press Assoc.

Keynoter and conference co-chairman was Sol L. Swartz, mechanical superintendent, Harrisburg (Pa.) *Patriot-News*. Theodore A. Serrill, PNPA general manager, was director of the conference.

At the concluding luncheon meeting held on Saturday afternoon, March 19, two



**Mid-Atlantic Executives**—From left to right these men are: Sol L. Swartz, Mechanical Supt., Harrisburg (Pa.) *Patriot-News* and Mid-Atlantic Conference Co-chairman; Theodore A. Serrill, General Mgr., PNPA and Mid-Atlantic Conference Director; William H. Pennington, Production Mgr., Red Bank (N. J.) *Register*, and Mid-Atlantic Conference Co-chairman.

speakers addressed the executives. Hon. Raymond Blattenberger, U. S. Public Printer, spoke inspirationally on *The Indispensable Craft*.

### No Magic Formula

ANPA Mechanical Dept. Mgr. Richard E. Lewis spoke on technological changes which have occurred in the newspaper printing industry recently. He discussed production costs. He said: "The problem of cost reduction in newspapers will not be solved by someone coming up with a magic formula that will apply to every daily newspaper. Nor is it going to be solved by someone coming into your particular plant and saying: 'Do this, do that, or do the other thing.' It takes a constant program of inspection, analysis, and supervision to realize the cost savings that are possible in the daily production of a paper."

The Linecasting Machine and Machines' Clinic was presided over by William H. Pennington, production manager, Redbank (N. J.) *Register*. In the main, the speakers consisted of representatives of the three companies manufacturing linecom-

posing machines and/or parts. W. J. Mulroy, sales and service manager, Mergenthaler Linotype Co., discussed the Mergenthaler Hydraquadder; Frank Foster, field engineer, Intertype Corporation, spoke on improvements in slug casting machines, and I. Bendow, sales manager, Linotype Parts Co., presented a motion picture with illustrations and descriptions of the Selectromatic Quadder. Mechanical Supt. John T. Arnold of the New Brunswick (N. J.) *Home News* was the concluding speaker.

### Scan-a-graver Clinic

At the Scan-a-graver Clinic, three papers were presented. Nicholas M. Fellman, administrative assistant, Chester (Pa.) *Times*, served as Chairman of the meeting. Fellman reviewed developments of the Scan-a-graver since it was introduced approx. 8 years ago by Fairchild Camera and Instrument Corp.

A paper was presented by Charles M. Barber, pressroom foreman of the Pottstown (Pa.) *Mercury*, which had been prepared previously by Editor Sandy Hill of that paper. Hill stressed that all editors are picture conscious and want to print as many as possible in the daily newspaper. It seemed to be the consensus of Hill's discussion that the Scan-a-graver has enabled many small and medium size papers to print pictures promptly and regularly in their papers. Hill related that the Pottstown (Pa.) *Mercury* is noted throughout the East for its use of local pictures.

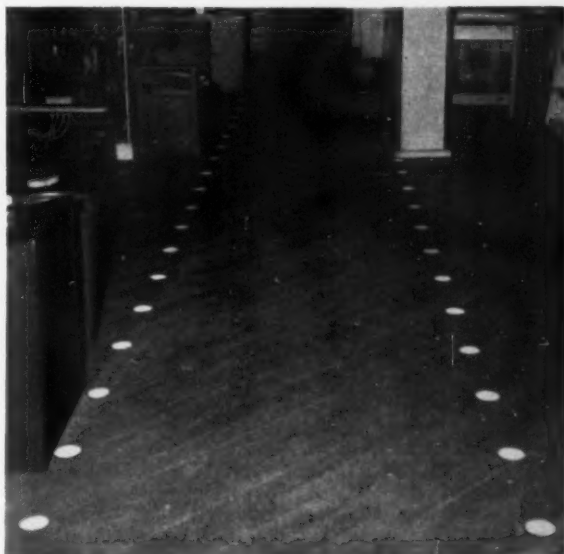
### Experiments With Color

Pressroom Foreman Charles M. Barber discussed the handling of Scan-a-graver cuts in the Pottstown (Pa.) *Mercury*—that is, with respect to mechanical treatment after the plastic cuts have been delivered to

### Traffic Aisle Markers—

Various means have been used for marking traffic aisle limits in printing plants. However, maintenance of the markers in some cases is a problem because of heavy traffic, foot wear and the strong solutions employed while scrubbing the floor. In the accompanying picture is shown a view of a section of the composing room at DeLuxe Check Printers, Inc., Cleveland plant.

The aisle boundaries are marked with 3 in. diam. yellow Brady Dotted Line Aisle Markers. These vinyl plastic disks are supplied with the adhesive already coated on one side of the disk, a protective cover being applied to the adhesive side of each disk for packaging. When the Markers are to be applied to the floor, the protective covering is peeled off. Superintendent James Wolfe states that when a Marker wears out or needs replacement it is not necessary to renew a several foot strip as in paint or tear up a several foot section of adhesive tape. Visibility of the 0.005 in. thick Markers, Wolfe remarked, is excellent and their use in DeLuxe plants has been satisfactory, particularly from the maintenance standpoint. The Markers can be applied to practically any type of floor except oil-caked or oiled wood floors. Manufacturer supplies full directions.



the composing room and how they are handled through to the pressroom. He spoke of experimental attempts to run color with plastic engravings. He said that although the reproductions weren't too bad, his associates were not satisfied. Trouble occurred in registration which was caused by the plastic pieces for each color not being cut the same size. Experiments were conducted in collaboration with the ANPA Laboratories at Easton, Pa.

### ANPA-Dow Etching Process

The session entitled Engraving and the Dow Process was presided over by Hans Kraatz of the Altoona (Pa.) *Mirror*. So far as actual plant usage is concerned, it became evident at the Clinic that the magnesium fast etch process still is in a highly experimental stage. A most informative paper was delivered by L. R. Durant, liaison engineer, ANPA Laboratory, Easton, Pa. Durant discussed briefly the process, availability of the equipment, machine cost, license, royalty, training and initial operation. Durant stated that normal overall installed cost with accessory equipment, wiring, piping and ventilation should not exceed \$10 thousand per machine. A license issued by the Dow Chemical Co. provides that newspaper operating under the Dow patent pay a royalty of 25c per sq. ft. for all magnesium process. Others who spoke on the process were William Hudson, Century Engraving Co., Philadelphia and S. D. Willey, mechanical superintendent, New York (N.Y.) *Daily News*.

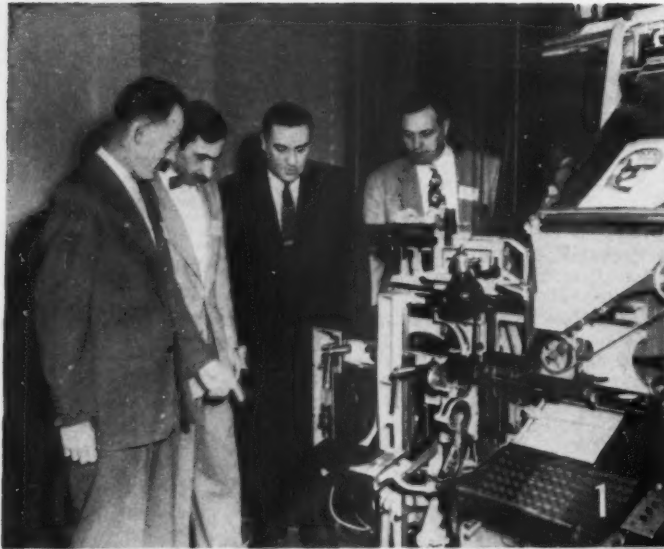
## Cutting Costs In Composing Room

THE major topic for discussion at the recent Mid-Atlantic Mechanical Conference newspaper composing room session was concerned with reducing costs. Five speakers addressed the meeting which was presided over by A. H. Tolley, mechanical superintendent of the Philadelphia *Inquirer*.

### "Know the Yardstick"

Tolley led the discussion. He said: "In arriving at costs, you ought to know just





### Mid-Atlantic Mechanical Conference Exhibits Draw Conference Attendees

(All identifications left to right)

1.—Henry Curlander, Matrix Contrast Corp.; Don Cooperstein, machinist, Oakhurst (N. J.) *Home-Times*; John Busey, Linotype Parts Co.; Wilmer F. Eagans, Stereo-Press Supt., Norristown (Pa.) *Times-Herald*.

2.—William Otter, Vice Pres., Imperial Type Metal Co.; Nicholas M. Fellman, Administrative Asst., Chester (Pa.) *Times*; M. C. (Ted) Pintard, Executive Vice Pres., The Wm. C. Herrick Ink Co.; Hans Kraatz, Photoengraving Supt., Altoona (Pa.) *Mirror*.

3.—Edward A. Rehm, Field Engineer, Wood Newspaper Machinery Corp.; J. R. Grove, Stereo-Press Foreman, Hagerstown (Md.) *Herald-Mail*; R. M. Crutchley, Mechanical Supt., Annapolis (Md.) *Evening Capital*; C. G. Tiefert, Wood Newspaper Machinery Corp.

4.—Lloyd P. Burns, Secretary, New Jersey Press Assoc.; Ed. P. Fraher and Bud Fishburn, Burgess Cellulose Co.; Herbert C. Taylor, Production Mgr., Bethlehem (Pa.), Atlantic City (N. J.) and Leavittown (Pa.) Papers.

what your composition volume really is—news matter as well as advertising. Some of us may have seemingly high costs because all of our production may not have been figured in arriving at the overall cost. At the *Inquirer* we use several standards for comparing costs. Our real basis, of course, is the total columns set in a weekly period and this again is accumulated into a 28 day period with 13 of these periods in a year. To arrive at the total of columns set, the Composing Room pulls a proof of all type matter set, whether advertising or minion. We use a map measuring device with a revolving wheel to count this space. This is totaled into columns for the week's production and divided into the payroll which gives me the labor cost per column set. This is one yardstick.

"The other yardstick," continued Tolley, "is the cost per page printed. This will vary considerably from the cost per column set, since many columns are not used in the

week in which the composition is done. Generally speaking the cost per page printed will be higher than the cost per column set because kills and deletions and revisions as well as unused news matter never does get into the printed page.

"We have established units of cost for various kinds of work. For instance, department stores would be one category, food advertising another, financial, classified, others, and more intricate projects, such as home improvements, radio, televisions, washer promotion, would constitute another. We compute the cost of a thousand-line unit in these categories. Of course, the cost of some categories run higher than others. If some categories are considerably out of line, then something should be done to review the reason why. These unit costs are subject to review from time to time. Scale increases will increase the costs, change in procedures by the agencies or the advertisers may add to the cost, these are

all things that we try to watch. Our composing room foreman is kept well informed via these weekly and period reports as to what his various divisions of work are costing."

Tolley also discussed good supervision as one of the requirements in helping hold down composing room costs. A good foreman directs the methods to be used in doing the work and is selective in assigning work to journeymen most competent in handling the different types of work. He also mentioned that "As a sort of iron fist in a velvet glove we make certain charges for other than a normal amount of revision in advertisers' proofs. . . We charge for certain types of engravings that go beyond ordinary illustration requirements."

Two addresses about the changeover to a 9 col. newspaper page were made by Asst. Gen. Mgr. Thos. A. Davis, Pottsville (Pa.) *Republican*, and Mechanical Supt. Thos. Hodge, Philadelphia Suburban News-



papers, Inc. Davis reported: "The real motivating reason behind 9 col. at the Pottsville (Pa.) *Republican* was economic. A pleasant by-product of our real reason, we think, is a better paper." Hodge stated: "We found that not a single reader noticed the difference." He enumerated the advantages and economy in platemaking by reason of fewer plates as well as reduction of newsprint consumption.

### The Deadline Problem

It seems that in common with many newspaper production executives, Mechanical Supt. Warren H. Detwiler, of Lancaster (Pa.) Newspapers, Inc., also encounters difficulties with some advertising copy and proofs. It is necessary to work employees overtime, which is one of the principal causes of higher composing room payroll cost.

Detwiler discussed the ad alley daily work sheet on which are placed details related to production of all advertisements. He also explained that if, when checking over this daily sheet, the foreman finds a compositor has spent from 20 min. to 30 min. on a 2 col. by 4 in. ad of average composition, he goes to the compositor to find the reason why. In some cases, during that half-hour, the compositor went for a cup of coffee, or for a Coke, or he just stepped into the sports department to check a ball score or a race result. Keeping tab on the compositor's time has helped to cut composing room costs. The composing room daily overtime record cards are checked and analyzed by Detwiler. Sometimes, after a conference with the foreman, ways and means have been found to eliminate overtime. On occasion, complaints to the editor or advertising manager have resulted in working employees overtime.

Detwiler discussed deadlines at some length. He paid his respects to the advertising minority who upset advertising deadlines. He observed that in the case of special sections, if a better deadline could be set up, costs could be cut, especially if advertising copy could be worked in with the regular daily composing room routine.

### Hand Numbering Machine for Take Identification

Collier Elliott, engineering counsel, Mergenthaler Linotype Co., discussed *An Engineer Looks at the Composing Room*. His address consisted of the engineer's observations with respect to an overall view of the surroundings when he steps into a composing room. The first impression is one related to neatness or clutter, cleanliness of painted walls and windows, general level of overall lighting, noise level, strong or unpleasant odors, temperature and humidity. In his discussion, Elliott stressed that no stop watch nor speedup was involved in his suggestions with respect to motion saving on the part of the worker. "Carried out properly," he stated, "the elimination of unnecessary motion and doing the work the easiest possible way, would result in less effort expended by the worker with greater or better output." He explained in some detail the elimination of the pencil which copy-cutters use to mark takes by using a hand numbering machine. With the numbering machine, the handwriting time necessary to identify story and take number would be eliminated and the information could be conveyed by using the first digits as story numbers and the last as take numbers. His explanation was extremely interesting.

## Equipment Sales and Installations Reports

### Hamilton Tool Co.

THREE PRESSES AND COLLATOR TO CUBA—The Hamilton Tool Co. recently shipped three business form printing presses and a collator to the Impresora Ariel, S. A., of Havana, Cuba. According to Hamilton's President Fred W. Schlichter, increasing promotional effort is being directed to the company's foreign markets, with emphasis being placed on Latin America. The three business form printing presses shipped to Havana, Cuba, are of the rotary type, employing a continuous web of paper. Three colors can be printed simultaneously on presses at approx. 500 f.p.m. Rotary-punch file holes and perforations through the web are also done simultaneously. The final operation is either folding of the web in zig-zag fashion along cross perforations (between the individual forms) ending up with a rectangular stack of interconnected forms, or, to rewind the processed continuous web onto a roll again. Cylinder circumference of the three presses are 14 in., 17 in. and 22 in. respectively. Adjustment for both sidewise and lengthwise registration control can be made at one printing station independently of the other station adjustments. Web tension and registration are held uniform during stops and starts as well as during steady operation.

The collator being shipped to Cuba is designed and built to collate (or group) six forms and five carbon sheets together, to obtain a six copy set of forms for typewriter or pencil use. Sets of forms may be produced at 18,000 sets of 8½ in. forms per hr., with other form lengths being processed in approximately the same proportion.

### Sta-Hi Corporation

Installations of Sta-Hi equipment are as follows:

MASTER FORMERS—Eureka (Calif.) *Times-Standard*; Butler (Pa.) *Eagle*; San Juan, Puerto Rico, Dept. of Education; Mexico, D. F., *Nacional*; Logansport (Ind.) *Pharos-Tribune*; Washington (D. C.) *Wall Street Journal* (2); Nashville (Tenn.) *Banner & Tennessean*; Milwaukee (Wis.) *Journal*; Woodbury (N. J.) *Times*; Muncie (Ind.) *Star &*

## Stereotypers Talk Of R.o.p. Color

DURING the R.o.p. Color Clinic at the Mid-Atlantic Mechanical Conference, Production Mgr. Andrew R. Mervick of the Pittsburgh (Pa.) *Sun-Telegraph*, described his paper's methods for producing r.o.p. color. He asserted that r.o.p. color is past the period when we could print papers "nearly" like the copy with fairly close register. The advertiser now expects good color matching and good register. Mervick related that his paper has been printing one, two and three colors and black for the past eight months.

"Very early in our experience," he said, "it was found that the proper preparation of matrices and plates in the stereotype department, although tedious, was time well spent and paid dividends." He remarked that his paper's makeready system is used with stereotype mats. . . . It is just the reverse of the method employed in printing color on the press with hard packing. Instead of creating high and low areas in the packing cylinder, the method calls for the creation of high and low areas in the stereotype plates.

He described in detail the method used for making ready the mats with gummed paper so the plates will be cast with high and low areas according to their printing value. In some instances, an underlay method is resorted to in making the plate. All of the work, such as cutting out the sheets and preparing the mat, is done by one stereotyper. The marking out, how-

ever, may be done by anyone having aptitude for that work.

He remarked that water should not be used to cool color plates. They should be allowed to cool at room temperature to prevent buckling.

Press; Kingston, Jamaica, *Daily Gleaner*; Miami (Fla.) *Herald*; DuBois (Pa.) *Courier-Express*; Ashland (O.) *Times-Gazette*; Rochester (Minn.) *Post-Bulletin*; Wisconsin Rapids (Wis.) *Tribune*; Benton Harbor (Mich.) *News-Palladium*; Coshocton (O.) *Tribune*; Bay City (Mich.) *Times*; Sherbrooke (Quebec) *La Tribune*; Vineland (N. J.) *Times*; Arlington (Calif.) *Times*; Billings (Mont.) *Gazette*; Selma (Ala.) *Times-Journal*; Sault Ste. Marie (Ontario) *Star*; State College (Pa.) *Centre Times*; Clearwater (Fla.) *Sun*; West Groton, Mass., *Certified Dry Mat Corp. Laboratories*; New York (N. Y.) *Jewish Daily Forward*; Racine, Wis., *Western Printing & Litho Co.*; Lancaster, Pa., *Times Pub. Co.*; Indianapolis, Ind., *Unitypco, Incorporated*; Red Bank (N. J.) *Register*; Roseburg (Ore.) *News-Review*.

MASTER ROUTERS: Camden (N. J.) *Courier-Post*; Logansport (Ind.) *Pharos-Tribune*; Joliet (Ill.) *Herald-News*; St. Louis (Mo.) *Post-Dispatch*; Davenport (Ia.) *Democrat-Times*; Aberdeen, (S. D.) *News*; Rochester (Minn.) *Post-Bulletin*; Meridian (Miss.) *Star*; Montreal (Quebec) *Star*; Cincinnati (O.) *Enquirer*; Vancouver (B. C.) *Sun*; Manila, P. I., *Ace Publications, Inc.*; Indianapolis, Ind., *Unitypco, Incorporated*; Orlando (Fla.) *Sentinel-Star*; Mexico (D. F.) *La Prensa*; Chicago Heights, Ill., *Williams Press, Inc.*

PREMIER ROTARY SHAVERS: Three Rivers (Quebec) *Le Nouvelliste*; Washington (D. C.) *Wall Street Journal*; Davenport (Ia.) *Times*; Rochester (Minn.) *Post-Bulletin*; Eugene (Ore.) *Register-Guard*; Newburgh (N. Y.) *News*; Fargo (N. D.) *Forum*; Anderson (Ind.) *Herald & Bulletin*; Richmond (Calif.) *Independent*; Atlantic City (N. J.) *Press*; Lorain (O.) *Journal*; Lancaster (Pa.) *Intelligence-Journal*; Greenfield (Mass.) *Recorder*; Pasco (Wash.) *Tri-City Herald*; Bakersfield (Calif.) *Californian*; Portsmouth (O.) *Times*; Winnipeg (Ontario) *Free Press*.

POWER LIFT FORM FILES: Miami (Fla.) *Herald*; Oklahoma City (Okla.) *Oklahoman & Times*; Tampa (Fla.) *Tribune*; Cleveland (O.) *Plain Dealer & News* (2); New Orleans (La.) *Times-Picayune* (2); Kennewick (Wash.) *Tri-City Herald*; Orlando (Fla.) *Sentinel-Star* (2); Toledo (O.) *Blade* (2); Providence (R. I.) *Journal-Bulletin* (2).

VACUUM FLAT FORMERS: Boston (Mass.) *Globe*; Saskatoon, Saskatchewan, *Modern Press, Ltd.*; Waterbury, Conn., *Eastern Color Prtg. Co.*

MASTER TRIMMERS: Los Angeles (Calif.) *Examiner*; New York (N. Y.) *Journal-American*; Denver (Colo.) *Post*; Philadelphia (Pa.) *Bulletin*; Washington, D. C., *Government Printing Office*; Tokyo, Japan, *Mainichi Press*.

### Wood Machinery

THE NEW YORK (N. Y.) *Times* has purchased three Metropolitan Heavy-Duty press units from Wood Newspaper Machinery Corp. Included are Autoreles, pneumatically-controlled 4-belt Staticary Strap Tensions, with auxiliary equipment. A Wood Automatic Autoplate machine with vacuum equipment, a Heavy-Duty Autohaver and an 8 T. Wood furnace are being added to the stereotype department.

ever, may be done by anyone having aptitude for that work.

He remarked that water should not be used to cool color plates. They should be allowed to cool at room temperature to prevent buckling.

### R.o.p. Color Requirements are Severe

Stereotype Supt. Charles G. Bowen, Philadelphia *Inquirer*, addressed the R.o.p. Color Clinic. The *Inquirer* has been working with r.o.p. color for five years. The problem is severe in comparison to many other papers because 14 plates must be cast for each color, meanwhile making certain that the No. 14 plate is just as good as the No. 1 plate.

Special chases are used for molding. The chases are incised with extra trim lines for hot and cold molding and with register pin holes for using celluloid proofs to register plates on which the register marks have been omitted or cropped off. Solid stereo base is used for mounting cuts and/or electros. All plates are mounted from the solid side of the chase. Register holes are drilled from the black or key plate to fit the succeeding colors. Special trim lines are used for the Automatic Autoplate machines. Molded and trimmed mats are placed in the Sta-Hi former for two cycles of 2 min. without vacuum for maximum shrinkage after which they are placed in the Final Trim for exact box size. To prevent the mat moving during casting, a strip of ¼ in. gummed paper is added to each head and foot bolster. The saw on the Automatic

(Continued on Page 52)



### Color Appraisal Task Committee Meets

(All identifications left to right)

A meeting of the Color Appraisal Task Committee of the Research and Engineering Council and the Illuminating Engineering Society held in Cleveland, March 16 and 17. The purpose of the meeting was (1) To visit the General Electric Lighting Institute, Nela Park, to witness actual demonstrations of the effect of lighting on color and (2) Review the work of the Task Force No. 1 Group (Frank Horton, Q. D. Dobras and G. L. Erikson) with a view to establish a method to be used by all groups for obtaining, collecting and evaluating experimental data necessary to establish standards for lighting and viewing of opaque color copies and photomechanical printed progressives.

Frank G. Horton, R. R. Donnelley & Sons Co., Chicago; G. L. Erikson, Braden-Supthin Ink Co., Cleveland, (representing

NAPIM); Ralph R. Enghouser, Sylvania Electric Products, Inc., Philadelphia; Anson Russell, General Electric Co., Cleveland; Warren B. Reese, Macbeth Daylighting Corp., Newburgh, N. Y. (liaison for Subcommittee PH 2.6-ASA); John M. Stebbins, Time, Inc., New York, N. Y.

F. L. Wurzburg, jr., Printing Ink Div., Interchemical Corporation, New York, N. Y., (representing Packaging Institute); Dr. John P. Weidener, Container Corporation of America, Manayunk, Pa., (representing TAPPI); Vincent C. Hall, Springdale Laboratories, Time, Inc., Springdale, Conn.; Norman Macbeth, Macbeth Corporation, Newburgh, N. Y., Co-Chairman; Robert E. Rossell, Research and Engineering Council, Washington, D. C. Philip E. Tobias, Edward Stern & Co., Philadelphia, Chairman.

## PIA's Web Offset Section Meeting

THE Web Offset Section of the Printing Industry of America held its second meeting on March 24 and 25, in Rochester, N. Y. On the afternoon of March 23, prior to the start of the conference, the Executive Committee of the Web Offset Section met under the chairmanship of the Section president, Herman J. Schultz, of Chicago.

A meeting relating to many of the production problems of this specialized

printing method was planned in conjunction with the PIA Convention to be held in Atlantic City in October. Items on the agenda will include techniques in the handling of coated papers, selection of inks in color printing, and factors relating to spoilage.

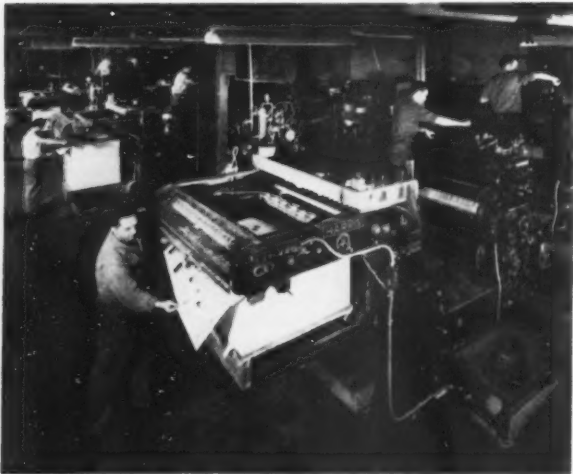
The only limitation of membership in the Section is operation of web offset equipment. There will be no dues, as the minor expenses of meetings can be cov-

ered by registration fees. New members, however, must first become members of PIA before making application to the Section.

At the first session of the conference, held at Hotel Sheraton, Rochester, the group was addressed by Frank Eichorn, president of the Printing Industry Assoc. of Rochester, who welcomed the panel to Rochester. Following this brief talk, Floyd Phillips, of Dayton, O., presented a technical paper, *How We Eliminated Plate Cracking*, at the close of which Chairman Schultz led a discussion on the related problems of plate cracking as applied to web offset production.

During the balance of the morning session, the panel examined methods and developments regarding mechanical aids for the web offset printer. The technical representatives of manufacturing and supply firms joined in the discussion by offering data concerning the progress being made to meet the requirements of this rapidly growing segment of the printing industry. After luncheon, the group visited the Graphic Arts Laboratories of Eastman Kodak Co.

The morning session of the second day of the conference was held at the Rochester Institute of Technology, where the group was addressed by Dr. Mark Ellingson, president of the Institute, who outlined the important role played by the



Four million two-color pages a day can be printed on the offset presses shown above in a section of the pressroom. These presses, as well as all other sections of the plant, were in full operation during the open house.

**Holds Open House**—The 137 year old William G. Johnston Co. has been one of the printing industry's most consistent advocates of "advertise with everything". Over 1500 company guests, attending a Johnston open house on April 21, received a brochure following a tour through the company's \$250 thousand newly enlarged building with expanded facilities. Newspaper advertising and publicity, as well as local television coverage of the open house, helped to underline the impression that great company age and progressive policies can be merged successfully in the same printing organization.









"That? Oh, it's the follow-up for this mailing piece."

web offset program as part of the Graphic Arts Research Dept.

After hearing Dr. Ellingson, the group toured the Graphic Arts facilities of the school, after which a panel discussion was held. The panel, composed of five members of the Staff of the Institute, answered questions placed before it.

During the luncheon meeting, presided over by Hyman Safran of Detroit, the morning discussions were continued. At the afternoon session Donald R. French, of Canton, O., presented a report entitled: *Web Offset Printing on Coated Stock*. The remainder of the session was turned over to a round table discussion of paper problems and the effects of heat-set inks in web offset production.

## Smaller Cities Will Have Inning at ANPA Meet

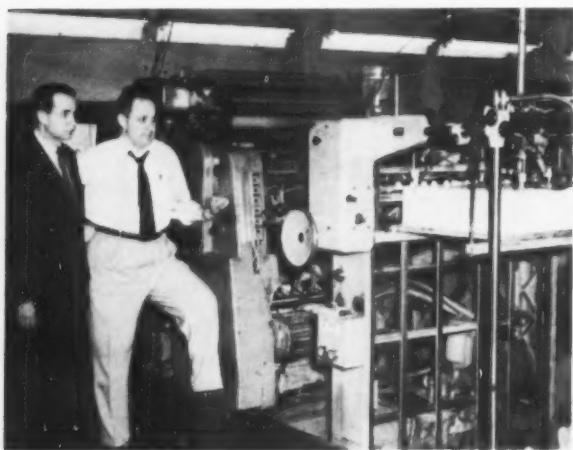
It has been announced by Richard E. Lewis, manager, ANPA Mechanical Dept., that a Smaller Cities Session will be held again this year at the June

ANPA Mechanical Conference. This meeting will take the form of a panel meeting with a number of executives from papers of smaller circulations providing the answers to inquiries from the floor.

The Smaller Cities Session is scheduled to be held at the Edgewater Beach Hotel, Chicago, Monday, June 6, 8 o'clock p.m.

Chairman of the meeting will be Mechanical Supt. Charles A. Frederickson, Westchester County Newspapers, White Plains, N. Y. He will be assisted by Allan M. Woods, production manager, Long Island (N.Y.) *Newsday*, and George F. Marshall, production manager, Portland (Me.) *Press Herald, Express and Telegram*. Moderator for the meeting will be Press-room Supt. Leroy Coates, Grand Rapids (Mich.) *Press*.

Members of the panel will be: Photo-engraving Supt. Earl Currisse, South Bend (Ind.) *Tribune*; Head Machinist I. J. Chalifoux, Cleveland *Plain Dealer*; Photography and Engraving Supervisor Glen Prince, Beloit (Wis.) *Daily News*; Stereotype Supt. Lloyd Wright, Fort Wayne (Ind.) Newspapers, Inc.; Stereopress Supt. Leonard Clemens, Elkhart (Ind.) *Truth*; Composing Room Supt. Erie G. Ivany, Battle Creek (Mich.)



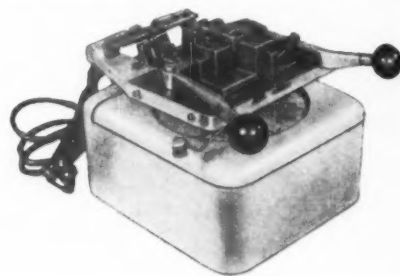
**Dart Press Adds New Unit**—Recently installed at Dart Press, New York, was a new Michle No. 29 Offset Press. This was the second such press for Dart. Watching the new unit in operation are Milton Kirschbaum (right), manager of Dart Press, and William J. Stevens, eastern district offset manager for Michle.

*Enquirer and News*; Charles Banker, Poughkeepsie (N. Y.) *New Yorker*; Press-room Supt. George Kent, New London (Conn.) *Day*; Walter Merkel, Holyoke (Mass.) *Telegram-Gazette*; Claude E. Schnell, Reading (Pa.) *Eagle-Times*, and Production Mgr. Herbert G. Taylor, Bethlehem (Pa.) *Globe-Times*.

## Makes Its Matrix and Casts Type

A HIGH-SPEED semi-Automatic typesetting machine has been invented by John M. Humphries of London NW4, according to London (Eng.) *Printing World*. Name of the new typesetting machine is Brimulta Sorts-master and it is understood it will be launched on the market in the near future. Main distributors are Multiple Acting Flux Ltd., 336 Watford Way, London NW4.

Complete unit of the Brimulta Sorts-master occupies 1 cu. ft. of space. It is of



sturdy construction and has been designed to give accurate production and long service in the composing section of the general industry.

Describing the technical details in the casting of type by the machine, J. I. Oettinger, managing director, Multiple Acting Flux Ltd., said: "You take a piece of type, or several pieces composed as a logotype, or maybe a character together with a loose accent, or then again it could be one of those special pieces which have at present to be hand-tooled individually and so laboriously.

"The original piece, or combination, is set in a special holder supplied with the machine, the time involved being seconds or so. The holder, or vice as it is called, is then applied to the mould of the machine, the size of which can be varied in both directions at will by the operator by simple twin lever adjustment. The mould is then closed, being automatically sized by the original piece, and just as soon as the levers are pressed, downwards this time, the metal is injected into the mould to give a matrix (or negative of the face details of the original) which has the same body size and width as the original. The matrix freezes practically instantaneously and can be handled within seconds of the injection," he said.

Oettinger said that all that is left to do is to change over the matrix for the original in the vice and do the same as before to get the reproduction. All reproductions are single pieces. For wood-cored mounts, and spacing material, special adaptor blanks are available and the matrix forming process is dispensed with. The

Brimulta Sortsmaster is capable of casting type and with no extra moulds and with no matrix costs. It plugs into a standard power socket.

"How many times has a compositor been held up for want of a few characters in a font? Why is it a compositor, no matter how many 'Es' and such, he lays in, is always sending for more when setting up that urgent job?" he added.

Demonstrations of the new typesetting machine can be arranged, it is understood, for anyone in the printing industry. Plans have been made for the machine to be demonstrated on the Multiple Acting Flux Ltd. stand, No. 44, Outer Row, 1st Floor, Grand Hall, at the 10th Intl. Printing Machinery and Allied Trades Exhibition which is to be held at London's Olympia, July 5-16.

## BOOKS

### Aluminum Platemaking

Material in Lithographic Technical Foundation's latest publication, *How To Make and Run Deep-Etch Plates (Aluminum)*, covers not only the subjects suggested by that title but also deep-etch plate troubles and how to prepare deep-etch platemaking chemicals for aluminum. This is the seventh booklet in LTF's series on platemaking. Copies may be obtained by LTF members for \$1.98 and by nonmembers for \$6.40.

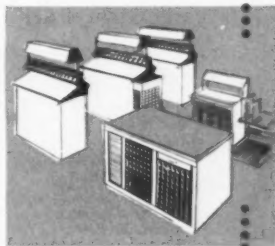
### Design Seminars

An announcement booklet contains further information on the four newspaper design seminars being sponsored by Mergenthaler Linotype Co. and conducted by Gilbert P. Farrar. First of the Seminars was held in New York (May 9-13). Others will be held in Chicago (May 23-27), San Francisco (June 6-10), and New Orleans (Oct. 24-28). Copies of the booklet and application blanks are available from the sponsor.

**Alan Wood Steel Reports**—Net sales and income of Alan Wood Steel Co. were \$36,247,726 and net profit was \$1,246,251 for 1954, according to the company's annual report. In 1953 sales and income amounted to \$59,950,833 and net profit \$3,213,690. Smaller sales and earnings in 1954 than in 1953 reflected decreased demand for steel, says John T. Whiting, Alan Wood president. The company expects sales will be helped by the addition of its new cold rolled mill which went into operation at the beginning of 1955.

**Gravure Plant Expansion**—Cylinders, Incorporated, Grenloch, N. J., rotogravure engravers, announced the appointment of Warren Daum to the newly created post of sales manager. The position was recently created as a result of the company's expansion program which included the acquisition of an additional 6000 sq. ft. at its plant, new photographic equipment and increased personnel. Daum will take charge of all sales for the existing and increased services offered by Cylinders, Incorporated. He expects to direct his efforts to the plastics and packaging industry.

Another boost from Hamilton  
toward higher Composing Room Profits!



## versatile place-for-everything work benches



In a composing room change-over from costly confusion to profitable efficiency, Hamilton machinists' work benches have an importance all their own. There's plenty of handy work area on the 1¾-inch thick, black finished birch tops... wood to protect delicate precision machine parts. Ample organized storage — for matrices and molds, valuable machine parts, tools, rags, cleansers — in the various steel drawers, cupboards and bins. Moreover, you can get benches practically custom-built to work needs and space, by choosing your own assemblies of tops, storage units and trays from a wide assortment.

Also by Hamilton: finest type cabinets, imposing tables, newspaper tables, ad assembly cabinets, galley cabinets, chase racks, trucks, miscellaneous units and accessories of many kinds.

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80-inch Work Bench No. 2224

"Customer's choice" assembly of No. 2303 top, No. 2205 cupboard unit with two removable shelves, and two No. 2201 7-drawer units. Each drawer has combination pull and label holder, and a stop to prevent accidental pull-out.



HAMILTON MANUFACTURING COMPANY • Two Rivers, Wisconsin

# A TrimO saw for Every Plant

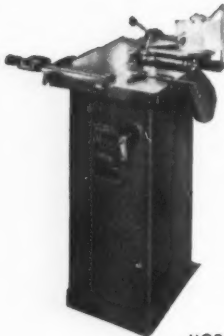


MODEL G-4

## *Glider* TRIM O SAW

The Hammond Glider TrimO saw is the top of the line of three Hammond TrimO saws and stands apart from everything in the field. There is no other saw that compares with its precision, smoothness and speed.

THE SAW WITH THE BALL BEARING TABLE



MODEL M-9

## *Mercury* TRIM O SAW

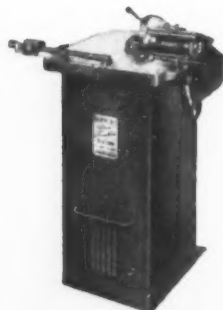
The Hammond Mercury TrimO saw may be compared with the "best" or "most expensive" saws on the market. For the medium size plant the Mercury is the ideal machine—it will handle every kind of slug, rule and plate work smoothly and accurately.

THE SAW WITH THE BALL BEARING GAUGE

## *Ben Franklin* TRIM O SAW

The Hammond Ben Franklin TrimO saw compares with the lowest priced good saws. Designed as the ideal machine to fit the production requirements and pocketbook of the smaller plants.

FINEST SAW IN THE LOW PRICE FIELD



MODEL BF-10

*Hammond*  
*Machinery Builders*  
INC.

1604 DOUGLAS AVENUE • KALAMAZOO, MICHIGAN

# Patents

For The GRAPHIC ARTS

Covering patents issued Feb. 1, 8, 15 and 22.

All new patents for the Graphic Arts are reported exclusively for *Printing Equipment Engineer* by Invention, Inc., an industrial patent research organization in Washington, D. C. Invention, Inc., presently has the only staff in the country that examines, in the U. S. Patent Office, the complete printed copy, drawing and page by page, every one of the several hundred new patents issued each week. *Printing Equipment Engineer* is the only trade publication in its field offering a report based on this complete coverage. For copies of the patents listed here specify the patent numbers and send 25c for each separate patent, or 10c for each trade mark or design patent (stamps not accepted) to the Commissioner of Patents, Washington, D. C.

## Composing Room:

### CONTROL UNIT FOR COMPOSING MACHINES

A tape controlled unit for linecasting machines prevents repeated operation of the assembly elevator when consecutive elevator signals appear in the tape. A composite lever and cam arrangement is used which arrangement has been adapted to automatic control mechanism as covered by patent 2,091,286. Patent 2,701,051 by Arthur F. Lindberg, assigned, by mesne assignments, to Teletypesetter Corporation.

### TYPE DISPENSER

The dispenser is associated with a type storage cabinet having a minimum of moving parts. The parts are adapted to efficiently and accurately deliver into the fingers of an operator a desired piece of type properly positioned and ready for insertion into a composing stick. Patent 3,701,722 by Arnold R. Bone, assigned to Dennison Mfg. Co.

### COMPOSING APPARATUS FOR REPRODUCING TYPOGRAPHICAL AND LIKE MATTER BY PHOTOGRAPHIC MEANS

The invention comprises an arrangement which includes means for automatically determining proportional distances between a light system, the plane of the object or character to be reproduced and the plane of the receiving surface to enable the type size of reproduced characters to be varied as desired. Patent 2,701,991 by Henry George Croucher, assigned, by mesne assignments, to The Monotype Corp. Ltd.

### JUSTIFYING TYPED LINE

Invention provides for automatically justifying lines of print photographically, with respect to methods which employ angular displacement between copy and a sensitized medium, for altering the ratio of width to height in the photographic image. Patent 2,702,499 by Leroy F. Dyer.

## Platemaking:

### ETCHING MACHINE

A printing plate is supported in an etching machine so as to create a random motion of the plate with a wider scatter band of variation angle. This is accomplished by using a rack support which is of helical coil spring form. Patent 2,700,838 by William Guenther.

### PHOTOENGRAVER'S ETCHING BATH

The strength of an etching bath acid solution may be accurately determined by the device of the invention so that a plate subjected to action of the tested solution during time period indicated by the device will be etched to a predetermined desired depth. Patent 2,701,183 by Augustin J. Powers, Jr., et al, assigned to Powers Chemco, Inc.

### METHOD OF MAKING PHOTOENGRAVING PLATE

The method is applicable to preparation of printing plates made from a magnesium base sheet having a surface coating of zinc and involves the use in the etching bath of a substance insoluble in the bath but active to prevent undercutting. Patent 2,701,186 by Robert T. Hendrich et al, assigned to The Wire Coating and Mfg. Co.

### PHOTOMECHANICAL CORRECTION OF PHOTOGRAPHIC IMAGES

Invention relates to correction of a photographic image to suppress unwanted detail in a part of the image, to vary contrast of the whole image, or in the case of colored images to correction of color imperfections and in sensitivity of the emulsions. Patent 2,701,196 by Rudolf Michael Peter Conrad.

### PRESSURE PRESCREENED GRAPHIC ARTS FILM

A halftone pattern in a flat silver halide emulsion layer on a support is desensitized by pressing against it in the presence of water a hard surface with a halftone pattern of raised dots to form a halftone material by shear stress. Patent 2,701,199 by Rudolph E. Damschroder et al, assigned to Eastman Kodak Co.

### METHOD OF PREPARING DIAZO PHOTOLITHOGRAPHIC PLATES

Lithographic plates which have been produced from light sensitive materials, after exposure behind a master, are treated with a water soluble azo solution which will react to form a hydrophilic azo dye which does not accept greasy ink and avoids scumming. Patent 2,701,242 by Wilhelm Neugebauer, et al, assigned, by mesne assignments, to Azoplate Corporation.

PRINTING EQUIPMENT *Engineer* — May 1955



### PATENT SEARCHES

For Patent Research in the U.S. Patent Office, or a prompt estimate on any type of search, write

INVENTION, INC.  
Munsey Bldg. Washington, D.C.

### LIGHT-SENSITIVE PHOTOGRAPHIC ELEMENT AND PROCESS OF PRODUCING PRINTING PLATES

Planographic relief or intaglio plates having bases of metal, glass or stone, are coated with a stable light-sensitive layer so that the material may be supplied commercially in the form of pre-sensitized plates. Light-sensitive layer may be the condensation product of 2 mols of 2-diacid naphthol-(1)-S-sulpho-chloride with 1 mol of metol. Patent 2,701,243 by Maximilian Paul Schmidt, assigned, by mesne assignments, to Azoplate Corporation.

### PHOTOGRAPHY REGISTRATION GAUGE

The gauge is devoid of movable parts, is attachable to a printing frame or a photo-composing apparatus, and assures accurate registry of negative, positive and auxiliary photographic plates such as are required for a multi-color printing project. Patent 2,701,195 by Frederick H. Fleischmann.

### Printing Presses:

#### IMPRESSION CYLINDER FOR PRINTING MACHINES

The impression cylinder is mounted on its supporting shaft by means of ball or roller bearings which are lighter running and narrower than the slide bearings previously used. The bearings are arranged in a recessed neck part of the cylinder and thus control cams can be loosely seated on the neck, making a very compact structure. Patent 2,700,931 by Paul Dietrich, assigned to Maschinenfabrik Augsburg-Nurnberg A. G.

#### PILE CHANGER

For replenishing a supply of sheets for a printing machine, main and auxiliary pile supports are provided which are responsive to the movements of a single height gauge. Patent 2,701,136 by Morton Schmidt et al, assigned to Schmidt Lithograph Co.

#### DEVICE FOR CHECKING THE PROCESS RESULTS OF PRINTING PRESSES

Registry between type forms and the cylinders of printing presses can be accurately measured by using instead of the printing form a holder including a dial gauge to be mounted on the carriage and provided with a strip which can be easily moved over the dial gauge so as to indicate a relative displacement under conditions prevailing during the printing proper. Patent 2,701,420 by Johan Frederik Monroy et al, assigned to Stichting Instituut voor Grafische Techniek T. N. O.

#### REGISTERING CYLINDRICAL FORM

The transparent reflector covered by patent 2,289,557 is used in this apparatus for registering plate cylinders for multi-color presses. It provides for illumination of the detail and the plates on the respective cylinders and for balancing the illumination on the two surfaces so that the view through the reflected image may be balanced. Patent 2,701,521 by Arthur K. Taylor.

#### FOUNTAIN BLADE ASSEMBLY

Thin, highly sensitive ink fountain blades are bonded to their backing plates by means of thermo-setting material so that internal stresses and warping of the blades are eliminated. Patent 2,701,523 by Edgar A. Luscombe, assigned to Miehle Printing Press and Mfg. Co.

#### MULTICOLOR ROTARY PRINTING PRESS

The press is of the type in which multi-color printing offset machines are disposed in series. The machine consists of two self-contained five-cylinder printing units through which sheets are conveyed by individual chain gripper mechanisms which cooperate with respective impression cylinders of the press. Patent 2,702,002 by Werner Koch, assigned to Faber & Schleicher Aktiengesellschaft.

### ANPA is Initiating Cost Record Blanks

Research on preparation of simple but adequate forms to maintain records of composing room production and costs is the first project not dealing directly with mechanical production techniques and equipment announced by American Newspaper Publishers Association Research Institute.

There is broad agreement on the need for forms to be used, with variations as to size of newspaper plants, giving the essential facts on composing room production and costs. Material would be basic and available to those publishers who would want to compare with each other.

The ANPA might be able to establish

some kind of regular reporting service similar to ANPA reports on waste paper figures which have become accepted statistics for individual publishers to check their own operations.

In one form or another this idea has been under consideration by ANPA Mechanical Committees for several years but now the committee believes it requires attention on a wider base in the newspaper business.

A mechanical subcommittee headed by J. Harold Mintun, production manager, Pittsburgh (Pa.) Press, made the recommendation for wider consideration.

A specialist will direct the project as one of several now conducted by ANPA Research Institute and reports will be made from time to time to the ANPA membership.

*sharp* **HALFTONES**

*clean* **SOLIDS**

**TYPE SHARP Clean**

**SOLIDS**

**THE BEST IMPRESSIONS  
with Tingué, Brown Press Packing!**

Tingué, Brown blankets will consistently do the job that the ad man demands.

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## Conference Dates

(With Organization Name and Principal Officer)

**American Photoengravers Assoc.** — 1955 Conv., Waldorf-Astoria Hotel, New York, N. Y., Oct. 10-12. Exec. Secy. Frank J. Schreiber, 166 W. Van Buren St., Rm. 450-A, Chicago 4, Ill.

**ANPA Mechanical Conf.** — 1955 Conf., Edgewater Beach Hotel, Chicago, June 6, 7, 8. Mgr., ANPA Mechanical Dept.

Richard E. Lewis, 370 Lexington Ave., New York 17, N. Y.

**Book Manufacturers' Institute—1955 Conf.**, The Greenbrier, White Sulphur Springs, W. Va., Oct. 13-15. Secy. Miss A. G. Watson, 25 W. 43rd St., New York 36, N. Y.

**Fifth District Craftsmen's Conf.** — 1955 Conf., Netherland-Plaza Hotel, Cincinnati, Aug. 6. Secy.-Treas. Dave Walker. Adm. Asst., Graphic Arts Assoc. of Michigan, 320 W. Lafayette St., Detroit 26.

**Graphic Arts Trade Assoc. Executives** — 1955 Conf., Hotel Muehlebach, Kansas City, May 25, 26. Secy.-Treas. Arthur L. Johnson, Graphic Arts Assoc. of Milwaukee, 704 W. Wisconsin Ave., Milwaukee 3, Wis.

**Gravure Technical Assoc.** — 1956 Annual

Meeting, Hotel Biltmore, New York, N. Y., Feb. 1-3. Secy. Len S. Pinover, Room 4800, 30 Rockefeller Plaza, New York 20, N. Y.

**Great Lakes Newspaper Mechanical Conf.** — 1956 Conf., Schroeder Hotel, Milwaukee, Wis., Jan. 29, 30, 31. Secy.-Treas. Don Clark, Stereotype Supt., Grand Rapids (Mich.) Press.

**Illinois Newspaper Mechanical Conf.** — 1955 Conf., Leland Hotel, Aurora, Ill., Sept. 24, 25. Secy.-Treas. Wilbur Augspurger, Peoria *Journal-Star, Inc.*, 119 So. Madison St., Peoria 2, Ill.

**Intl. Assoc. Electrotypers & Stereotypers** — 1955 Conf., Shoreham Hotel, Washington, D. C., Oct. 19-22. Exec. Secy. A. P. Schloegel, 701 Leader Bldg., Cleveland 14.

**Intl. Assoc. of Printing House Craftsmen** — 1955 Conv., Netherland-Plaza Hotel, Cincinnati, O., Aug. 7-10. Exec. Secy. Pearl E. Oldt, Rm. 806, Transportation Bldg., 307 E. Fourth St., Cincinnati 2, O.

**Intl. Graphic Arts Education Assoc.** — 1955 Conv., Carnegie Institute of Technology, Pittsburgh, Pa., July 3-8. Exec. Secy. Samuel M. Burt, 719 Fifteenth St. N. W., Washington 5, D. C.

**Intl. Printers Supply Salesmen's Guild** — 1955 Conv., Netherland-Plaza Hotel, Cincinnati, O., Aug. 7-10. Secy. Myron F. Lewis, 608 S. Dearborn St., Chicago 5.

**Intl. Typographic Composition Assoc.** — 1955 Annual Conv., Hotel Claridge, Atlantic City, N. J., Sept. 7-10. Secy. Frank M. Sherman, 1015 Chestnut St., Philadelphia 7.

**Iowa Daily Newspaper Mechanical Conf.** — 1955 Conv., Hotel Martin, Sioux City, Ia., May 7-9. Sec.-Treas. Paul F. Kamler, Mechanical Supt., Clinton (Ia.) *Herald*.

**Kansas-Missouri Newspaper Mechanical Conf.** — 1955 Conv., Town House Hotel, Kansas City, Kan., Sept. 10, 11. Kansas Secy.-Treas. Larry Miller, Kansas Press Assoc., 701 Jackson St., Topeka, Kan. Missouri Secy.-Treas. William A. Bray, Missouri Press Assoc., 220 Walter Williams Hall, Columbia, Mo.

**Lithographers National Assoc.** — 1955 Conv., Lake Placid Club, Lake Placid, N. Y., June 20-24. Exec. Dir. W. Floyd Maxwell, 420 Lexington Ave., New York 17, N. Y.

**Mid-Atlantic Newspaper Mechanical Conf.** — 1956 Conf., Lord Biltmore Hotel, Biltmore, Md., March 8-10. Conf. Dir. Theodore A. Serrill, PNPA General Mgr., 300-312 Telegraph Bldg., Harrisburg, Pa.

**National Assoc. of Litho Clubs** — Exec. Secy. Frank Mortimer, U.S. Government Printing Office, Washington 25, D. C.

**National Assoc. of Photo-Lithographers** — 1955 Conf., Hotel Statler, Cleveland, O., Sept. 21-24. Walter S. Soderstrom, 317 W. 45th St., New York 36, N. Y.

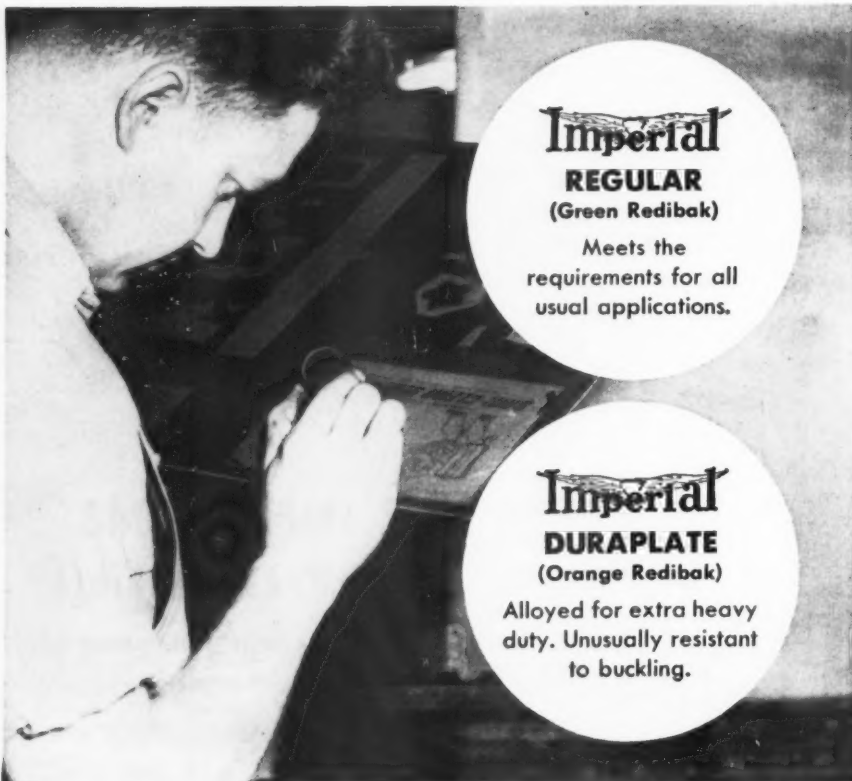
**National Printing Equipment Assoc., Inc.** — 1955 Conv. Meets concurrently with Printing Industry of America, Hotel Chalfonte-Haddon Hall, Atlantic City, N. J. Secy. James E. Bennet, 140 Nassau St., New York 38, N. Y.

**National Safety Council Printing and Publishing Section** — 1955 Meeting, Conrad Hilton Hotel, Chicago, Oct. 17-21. Staff Rep. James D. Saul, National Safety Council, 425 N. Michigan Ave., Chicago 11.

**New England Mechanical Conf.** — 1955 Conf., Hotel Statler, Boston, Mass., Oct. 15, 16. Secy.-Treas. Walter C. Crighton, Comp. Room Supt., New London (Conn.) Day.

## Goodwill Between Metal and Skilled Craftsman

### Imperial Zinc



Engraved on Imperial Zinc—110 Screen.

Under the glass of the engraver, the fine, uniform qualities of Imperial Zinc are quickly apparent. Highly resistant to buckling, easy etching, withstands multiple bites—all add up to Goodwill Between Metal and Craftsman.

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### Pass It Along

Many printing plant executives pass along copies of *Printing Equipment Engineer* regularly to interested employees in the plant. In this way, a more interested production organization will be maintained.

**New York State Capital District Mechanical Conf.**—Secy. Walter E. Lewis, Asst. Supt., Schenectady *Union-Star*.

**Northwest Mechanical Conf.**—1956 Conf., tentatively set for Radisson Hotel, Minneapolis, Minn., Feb. 18-20. Secy. Treas. Ralph N. Carson, Linecasting Instructor, Dunwoody Industrial Institute, 818 Wayzata Blvd., Minneapolis.

**Pacific Mechanical Conf.**—1955 Conv., Sheraton-Palace Hotel, San Francisco, Calif., Sept. 9-11. Secy. Edward Maggi, Phillips and Van Orden, 870 Brannan St., San Francisco 3.

**Packaging Institute Assoc.**—1955 Forum, Hotel Statler, New York, N. Y., Nov. 1, 2. Exec. Dir. Laurence V. Burton, 342 Madison Ave., New York 17, N. Y.

**Printing Industry of America**—1955 Conf., Hotel Chalfonte-Haddon Hall, Atlantic City, N. J., Oct. 15-20. Gen. Mgr. James R. Brackett, 719 Fifteenth St., N. W., Washington 5, D. C.

**Research and Engineering Council of the Graphic Arts Industry, Inc.**—1955 Meeting, Somerset Hotel, Boston, Mass., May 11, 12, 13. Managing Dir. Robert E. Rossell, 719 Fifteenth St., N. W., Washington 5, D. C.

**Rocky Mountain Mechanical Conf.**—Secy. Mark McCoy, Union Printing Co., 2155 Lawrence St., Denver, Colo.

**Screen Process Printing Assoc., Intl.**—1955 Conv., Ambassador Hotel, Atlantic City, N. J., Sept. 10-14. Exec. Secy. Robert H. Blundred, 549 W. Randolph St., Chicago 6.

**SNPA (Eastern Div.) Mechanical Conf.**—1955 Conf., Hotel Roanoke, Roanoke, Va., Aug. 22, 23. Secy. Ray B. Crow, Southern Newspaper Publishers Assoc., P. O. Box 1569, Chattanooga 1, Tenn.

**SNPA (Western Div.) Mechanical Conf.**—Secy. Walter Johnson, jr., P. O. Box 1569, Chattanooga 1, Tenn.

**Southern Graphic Arts Assoc.**—1955 Conv., Hot Springs, Ark., May 26, 27. Secy. Charles E. Kennedy, 1514 South St., Nashville, Tenn.

**Technical Assoc. of the Graphic Arts**—Secy. Treas. George S. Hammer, 8 Cherry St., Marblehead, Mass.

### To Find the Right Man

The 15,000 mechanical and production executive readers of *Printing Equipment Engineer* are vitally interested in improving production methods. They prove that by reading your Help Wanted Ad in the *Printing Equipment Engineer* Classified Section. It will bring response from highly qualified men. Rates can be found on page 63 of this issue.

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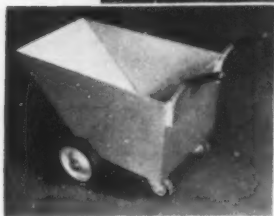
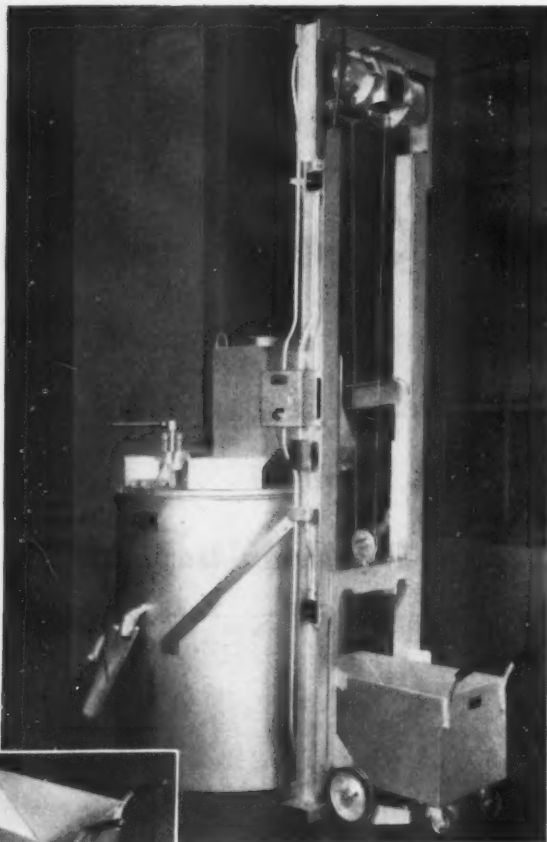
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Cart becomes part of loader; eliminates all hand loading and transfer of remelt type.

## Meet the new Kemp team!

**Kemp Immersion Remelt Pot and Kemp Metal Loader radically simplify and speed up scrap handling!**

Now you can remelt linotype scrap quickly and easily — with this new Kemp team! For one thing, you can wave good-bye to heavy hand loading! The Kemp Metal Loader is automatic . . . sturdily built along simple lines for long, trouble-free performance with a minimum of maintenance. Smooth operation of cart and hoist makes handling of scrap an easy job. Also, the Kemp Immersion Remelt Pot gives you quick heating with accurate temperature control, eliminates pot cracking and inefficient heat application. The unique Kemp construction results in less dross formation . . . does away with obnoxious dumping fumes.

Put the two together and you have a team that really speeds up scrap recovery . . . eliminates hand loading! See for yourself! For information on the Kemp Immersion Remelt Pot and Kemp Metal Loader, write today to: THE C. M. KEMP MFG. CO., 405 E. Oliver St., Baltimore 2, Maryland.

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EASY-TO-OPERATE  
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Materials  
Cost: Less Than  
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10"x10" Plate

1. Insert type form and plastic sheet into hot Eva-Press, apply pressure, let cure for 10 minutes.

2. Release pressure, extract all from Eva-Press and have finished matrix.

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## Mechanism of the Linotype and Intertype

Written for Machinist-Operators, Machinists, Superintendents and Students

Technical operating knowledge of the Linotype and Intertype is available in the 14th edition of this 334 page book. Revised and amplified by Oscar R. Abel and Windsor A. Straw, the text includes 200 illustrations. Information has been added about late improvements in the machines. A practical and essential book for every composing room.

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**PRINTING EQUIPMENT  
Engineer**

1276 W. 3rd St., Cleveland 13, O.

## Stereo Metal

(Continued from Page 28)

Under identical press conditions a plate with proper crystalline structure will give increased plate life over the plate without proper crystalline structure.

Hand in hand with the structure of the plate is the manner in which it is cast and cooled. The structure and cooling of stereotype metal are Siamese twins incapable of being separated.

### Primary and Secondary Cooling

The cooling of cast type metal and plates falls into two phases: Primary cooling and secondary cooling. Primary cooling is that cooling of the cast metal from the liquid state to the time it is normally separated from the mold. A temperature range of 275 deg. F. upward is involved. Secondary cooling is the subsequent cooling of the solid plate to room temperature.

### Temperature Controls

Primary cooling can be controlled in the casting box by the application of temperature controls on the water system of the jacket and cylinder. These controls may be automatic or manual. Due to the design of the cylinder water spray on the Junior and Automatic Autoplates, automatic controls are not feasible. Manual controls if used in conjunction with a temperature recording instrument can be beneficial.

### Jacket Controls

On the jacket of the casting box controls should be available to determine the water temperature in the jacket cooling chamber and a means to control the flow of water entering the jacket. Water flow control is usually more satisfactory when established at the outlet rather than the inlet of the jacket cooling chamber.

The wide variations in the temperature of water supplied to the machines due to season conditions cover a range of 35 deg. to 40 deg. Summer water temperatures may run as high as 80 deg. and winter temperatures can drop to 40 deg. for long periods of time. This is the condition of operation peculiar to those using water direct from the supply lines and not using a storage or mixing tank.

### Primary Cooling Cycle Control

Conditions of this type make it a necessity to keep constant control of the primary cooling cycle of plate casting equipment.

Jacket operation can be precisely controlled if the water temperature in the jacket cooling chamber is maintained as closely as possible to the temperature of the incoming water; the water flow should be regulated to maintain this temperature.

A check valve installed at the water inlet on the jacket will be of considerable help in securing proper primary cooling on the initial cast from each mat.

Since each stereotype foreman has the responsibility for the quality of the plates his department delivers and knows the conditions under which he must operate, I have no wish to arbitrarily set forth a given temperature setting to be maintained on any operation.

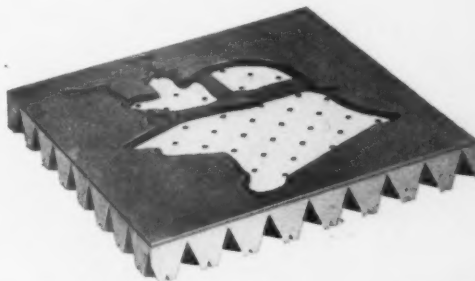
### 140,000 Imp. Per Plate

There is a definite relationship between jacket temperature and cylinder temperature in the primary cooling cycle. Proper crystalline structure and surface hardness are necessary to secure quality plates which will reproduce cleanly and resist surface wear in excess of 140,000 impressions per plate.

### Two Important Factors

The manner of molding the matrix and the density obtained in the mat plays a definite part in the primary cooling cycle. A mat compressed 10% of its original thickness has 75% more insulation value than a mat compressed 30% of its original thickness. In general the greater the compression of the mat on the printing surfaces the lower the density and insulation factors affecting the crystalline structure of the plate.

Metal casting temperature should be maintained as closely to 550 deg. at the mouthpiece of the spout as equipment and materials in use will permit. Casting temperature plays a vital role in the



LITE-BASE is a permanently stable mounting material which can be cast at low cost in any plant from type metal. It will not shrink—warp or compress under printing and molding pressure and can be accurately planed to within half-thousandths. Also, it can be re-melted time and again.

## Greater Precision — Greater Letterpress Elimination of Wood in Forms is the first Step

Below is a list of photoengravers, electrotypers, printers and typesetters who are equipped to supply plates mounted on Vandercook "Lite-Base":

Art Engraving Company, Houston, Texas  
Blundell Bros. Ltd., Wellington, New Zealand  
Bomac Engravers Ltd., Toronto, Canada  
Brown & Hartman Company, Tulsa, Okla.  
Bryan-Brandenburg Company, Los Angeles  
William Byrd Press, Inc., Richmond, Va.  
Cocks-Clark Engraving Co., Denver, Colo.  
The Davidson Company, St. Joseph, Mich.  
Dean's Printplate Service (Pty) Ltd. Durban, So. Africa  
Dept. of Public Printing and Stationery, Ottawa, Canada  
R. R. Donnelley & Sons Co., Chicago, Ill.  
The William Feather Co., Cleveland, Ohio  
Vincent B. Fuller, Philadelphia, Pa.  
W. S. Gilkey Printing Co., Cleveland, Ohio  
Hart Publications, Inc., Long Prairie, Minn.  
Herald-Review, Grand Rapids, Minn.  
F. J. Heer Printing Co., Columbus, Ohio  
Jersey City Printing Co., Jersey City, N.J.  
Kable Printing Company, Mt. Morris, Ill.  
Claire J. Mahoney, Kalamazoo, Mich.

Peter F. Mallon, Inc., Long Island City, N.Y.  
The Morgan Company, Tulsa, Oklahoma  
New Mexico Engraving Company, Albuquerque, New Mexico  
New Orleans Engraving & Electrotype Co., New Orleans, Louisiana  
Parker Art Printing Association, Coral Gables, Fla.  
D. W. Paterson Co. Pty., Ltd., Melbourne, Australia  
Popular Mechanics Company, Chicago, Ill.  
Potomac Electrotype Company, Inc., Washington, D. C.  
A. H. Pugh Printing Co., Cincinnati, Ohio.  
Sleeper Publications, Inc., Mount Holly, N.J.  
Southwestern Engraving Co., Dallas, Texas  
Walker Engraving Co. of Rochester, Inc., Rochester, New York  
Walker Engraving Corp., San Francisco, California  
Western Printing & Lithographing Co., Racine, Wis.  
Williams Press, Inc., Albany, New York

### These Schools Have Complete "Lite-Base" Installations

Carnegie Institute of Technology, Pittsburgh, Pennsylvania  
Rochester Institute of Technology, Rochester, New York  
Technical Trade School, Pressmen's Home, Tennessee

## VANDERCOOK & SONS, INC.

General Offices, Research Laboratory, Demonstration Room & Factory  
3601 W. Touhy Ave., Chicago 45, Ill. Phone: ROgers Park 1-2100  
Eastern Office & Demonstration Room  
323 E. 44th St., New York 17, N.Y. Phone: MUrray Hill 4-4197  
Western Office  
3156 Wilshire Blvd., Los Angeles 5, Calif. Phone: DUmkirk 8-9931



primary cooling cycle and requires much thought and study.

Equipment having a water chamber on the cylinder side of the casting box can use the same type of controls as on the jacket. On the Junior and Automatic Autoplate machines temperature control can be established through the use of a Pyrocon pyrometer on the cylinder surface and the setting of the manual water valve on the inlet line to maintain a desired temperature immediately after the removal of a plate.

#### Secondary Cooling Cycle

The secondary cooling cycle is usually not subject to difficulty. Normally it involves the cooling of the plate after shaving

and little thought is given to its effect upon the plate.

The primary cooling cycle has a direct connection to the secondary cooling cycle in respect to the fit of the plate on the press cylinder. The proper temperature relationship between jacket and cylinder is necessary to obtain plates which will hug the press cylinder properly.

The secondary cycle involves the contraction of the plate during the first second or two after the water is applied to the rib side of the plate. Subsequent expansion, actually the relief of stresses set up in the metal structure, occurs after the contraction period and the metal becomes normalized.

Unless the rib side of the plate is of a higher temperature than the printing



Photo by Constance Bannister

*"Ulcers...hmm...I think you should change to BURGESS MATS."*

**BURGESS CELLULOSE COMPANY**  
Manufacturers and Distributors  
of Burgess Chrome and Tone-Tex Mats

Freeport, Illinois



#### YET TO CATCH UP

Abstracted from address delivered by General Mgr. Ernest W. Lass, Asbury Park (N. J.) *Free Press*, before Mid-Atlantic Mechanical Conference, Ambassador Hotel, Atlantic City, N. J., March 1955.)

**"Certainly it's not necessary for me to tell you that while other industries have been going into automation, we (the newspaper printing industry) have yet to catch up with the industrial age. Indeed, were the Village Blacksmith to apply for work at General Motors, they'd make him an errand boy. But if Gutenberg came into our shop we'd make him a printer."**

surface, sufficient contraction will not occur and when the plate reaches a normalized state the fit of the plate on the press cylinder will not be tight.

This is a subject that has been cussed and discussed and the explanation just given, while not generally accepted, is physically true.

#### Acknowledgements:

In solving some of the problems which I have just discussed, and for help on metal problems in general, I am deeply appreciative for the technical material which has been made available by

The International Tin Research Council,  
Federated Metals Div., American Smelting and Refining Co.,  
Imperial Type Metal Co.,  
Government Printing Office.

## Literature for Asking

(Continued from Page 36)

structions are given. Please mention PEE No. 201L when requesting a copy.

#### MAT FORMER FOLDER

Sta-Hi Corporation has issued a four-page folder on its Master Former for treating stereotype dry mats. Vacuum is used to hold mats to the proper curvature in the machine. Motor-driven timers with a maximum range of 4 minutes 40 seconds, control the length of the treatment cycle. Thermostats are used to maintain predetermined temperatures of heat which is applied to both the face and the back of mats. Overall dimensions of the unit are 43 in. high by 40 in. wide by 33 in. long. Please mention PEE No. 265L when requesting a copy of the folder.



#### Pressroom

#### MIEHLE 61-76 OFFSETS

Unit construction of the Miehle Models 61 and 76 sheet-fed offset presses permits installation from a single to a five-color press as each unit is an integral assembly. This type of press construction is explained in a four-color broad-side prepared by Miehle Printing Press & Mfg. Co. Other features of both models are described and illustrations included. Specifications are listed. Please mention PEE No. 241L when requesting a copy.

#### FOUNTAIN AGITATOR REPORT

A field report containing statements by users on the Baldwin ink fountain agitator has been issued by William Gegenheimer Co. The agitator is designed for use on letterpress and offset presses. The four page report is printed in two colors and measures 8½ in. by 11 in. Please mention PEE No. 245L when requesting a copy.



#### 17 IN. BY 26 IN. SPEED-FLEX PRESS

A description of the 17 in. by 26 in. Speed-Flex Press for use in large manifolding plants is contained in a two page bulletin issued by Orville Dutro & Son, Inc. Operations performed on the press and general specifications are listed. The letterhead size bulletin is printed in two colors. Please mention PEE No. 246L when requesting a copy.

#### PRESS FOR INSURANCE WORK

Numbering and imprinting of folded policies, snapouts, daily reports on both sides of sheet in one impression are among the features of the Multipress described in a bulletin issued by B. Verner & Co., Inc. The sponsor cites the advantages of the press in the insurance field. Different models of the press are shown in the four page bulletin, printed in two colors and measuring 8½ in. by 11 in. Please mention PEE No. 247L when requesting a copy.



### Bindery

#### PAPER CUTTING KNIVES

How to choose, use and care for paper cutting knives is explained in a 24 page booklet issued by Harris-Seybold Co. A list of knife sizes for various makes of paper cutters is included. Please mention PEE No. 248L when requesting a copy.



### Mailing Room

#### LABELING MACHINES

Magnacraft Mfg. Co. has released a four page, two color bulletin in which is described its rotary labeling machine for magazine mailing. Specifications, illustrations and descriptive diagram are also included. The Rotary Labeling machine is said to handle all sizes and shapes of modern periodicals. For a copy, please mention PEE No. 249L in your request.



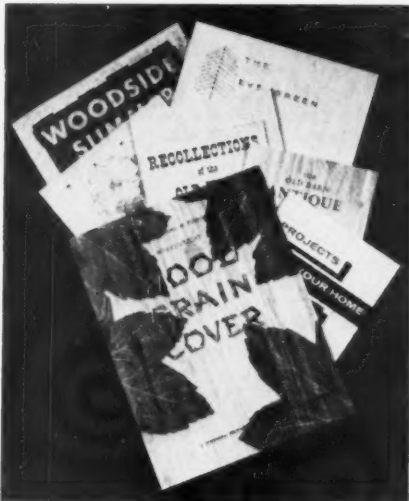
### Miscellaneous

#### STATIKIL BULLETIN

This bulletin consists of four pages and is descriptive of J. E. Doyle Co.'s Statikil for relief from static electricity. Used on printing presses by all processes, folding machines, pebbling machines, gluers, slitters and many other applications. For a copy please mention PEE No. 250L in your request.

#### WOOD GRAIN COVER

Demonstrating the effects of its Wheelwright Wood Grain Cover stock is the purpose of Mead Sales Co.'s new sales portfolio. Samples of various wood grains available are in-



cluded as well as samples of letterpress, offset and screen process work in varying color effects. Please mention PEE No. 263L when requesting a copy.

#### SURFACE PYROMETERS

Cambridge Surface Pyrometers are described in a well illustrated, 12 page bulletin released by Cambridge Instru-

ment Co., Inc. Fully described are the roll pyrometer, extension pyrometer, mold pyrometer and needle pyrometer and short descriptions of combination models and special models are included. All models are thermoelectric in principle and indicate the temperature of flat and curved surfaces, still or moving. For a copy, please mention PEE No. 253L in your request.

#### TACHOMETER BULLETIN

Small, electric tachometers for production control and checking operations are described in Electric Tachometer Corp.'s 20-page Bulletin 540. Included are ten Model M1200 magneto-type tachometers with accessories for connecting magnetos to the drive source through direct coupling, pulleys, chain-and-sprockets, spur gears, or friction contact. Voltage output of the magnetos may be read directly in r.p.m., ft. per min. or per sec., or other speed functions. Please mention PEE No. 256L when requesting a copy.

#### ENGINEERING SERVICES BULLETIN

*Automation and Automatic Machinery* is the title of a 4 page bulletin in which is described the engineering services

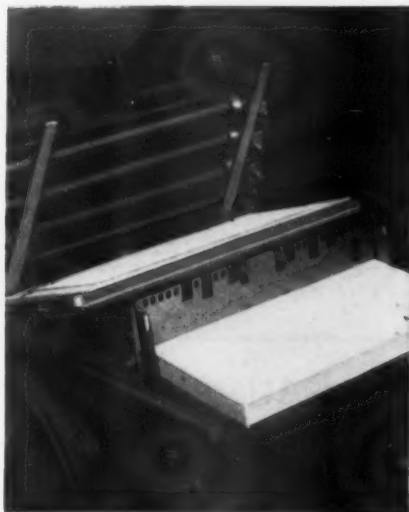
offered general industry by The de Flores Co. The company states that it specializes in the development of new processes and new machinery. Listed as projects undertaken in the Graphic Arts industry are: A newspaper stuffing machine, a coupon book printing and collating machine, banknote production equipment and processes, hard case bindery machines, electronic register controls and a binding process. Please mention PEE No. 255L in your request for a copy.

#### FLUORESCENT LUMINAIRES

A 9 in. by 3½ in., 28 page catalog of fluorescent luminaires for commercial and industrial use has been made available by the Westinghouse Electric Corp. In the booklet are summarized features of each type of luminaire and specifications. A four page tabulation of buying data is also included. For a copy, please mention PEE No. 175L in your request.

#### PLANT LAYOUT KIT

A printing plant layout kit which includes ten template sheets and a 17 in. by 22 in. ruled floor sheet is available from Hamilton Mfg. Co. The cardboard sheets contain templates of Hamilton and other composing room equipment, drawn to scale, as well as templates of equipment for



THE C&P NEW  
*Craftsman*  
WITH SIDE DELIVERY  
10 X 15 12 X 18  
PROVIDES SPEEDY  
MAKE-READY

With feed and delivery bars removed, platen and form on the NEW CRAFTSMAN are completely accessible. Sheet is positioned, gauge pins are set and overlays hung with greatest facility. Extension grippers, strings, friskets, etc. can be used whenever needed. Grippers may be moved to any position along bottom of platen.

But speedy make-ready is but one of the scores of features that make for profitable printing with the NEW CRAFTSMAN. Other outstanding features include:

NEW SIDE DELIVERY  
PRINTS ONION SKIN TO 12 PLY BOARD  
DUAL IMPRESSION CONTROLS  
EXTRA LARGE SHEET SIZE  
TIME PROVED INK DISTRIBUTION  
HAND-FEEDING PRACTICABLE



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**CHANDLER & PRICE**  
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Builders of Printing Machinery for  
Nearly Three Quarters of a Century

## Get Acquainted with the PEE YELLOW PAGES



● May we serve you? We're the "Yellow Pages" of P.E.E.'s Annual Reference Issue and eager to do your bidding. We have the answers to your questions regarding equipment and supplies available for all plant operations.

Any questions about TRADE NAMES? We have the answers from ABC to ZOMO.

Looking for a certain manufacturer, supplier or dealer? We have a comprehensive registration, listed alphabetically.

We're spilling over with a lot of good "tips" on purchasing equipment and supplies for the printing industry, so make it a habit to consult the "Yellow Pages".

**"WHERE TO BUY"**  
Printing Equipment and Supplies  
Reference Issue  
a few copies left — \$2.50 each

pressroom and bindery. Another sheet includes a listing of various makes of presses together with their floor area. Instructions are provided for making an equipment layout using the kit. Please mention PEE No. 96L when requesting this kit.

#### HUBER NEWS

Rome Kraft Co.'s new Rome, Ga., containerboard plant is described in the winter, 1954-55, issue of the *Huber News*. The plant cost \$25 million to construct with a production capacity of 650 T. a day. Mead Corp. and Inland Container Corp. jointly own the new facility. Another feature of this issue of the *Huber News* is a picture story of the Chicago *Tribune* three-color ink tank installation. Please mention PEE No. 258L when requesting a copy.

#### PLANT LAYOUT AID

Repro-Templates, Inc., gives a description of its plant layout service in two-dimensional templates in a new bulletin. The Repro-Templates service includes making special templates of machinery in two-dimensional scale where necessary. Please mention PEE No. 259L when requesting a copy of the bulletin.

#### NEW PAPER AVAILABLE

Champion Paper & Fibre Co. announces a new paper in its line called Chalice Opaque. The company describes this paper as a vellum finish sheet of high brightness, white color, good opacity, and possessing all the requirements for offset lithography. Chalice Opaque is available in 60, 70, and 80 lbs., basis weights. Please mention PEE No. 262L when requesting a sample.

#### ELECTRIC MOTORS

General Electric Co.'s new 28-page catalog of buying information on standard a-c fractional and integral horsepower motors is now available. Information on all motors includes photos, ratings, book prices, dimensions, weights, frame numbers and standard modifications. Please mention PEE No. 254L when requesting a copy.

## Mid-Atlantic

(Continued from Page 39)

Autoplate is raised  $\frac{1}{8}$  in. to allow for the extra trimming done in the registering machine. Casting is started with the black plate, the first two casts being thrown away. This takes care of final shrinkage.

Bowen explained that "When the 14 casts are made and numbered, we set the lights on the registering machine with the No. 1 plate and set each following color in the Autoplate machine to register with this setting before the plates are cast. If each following color does not come within registering position, the mat is moved in the machine and checked the second time. The four sets of plates are then put through the process of registering and trimming and are passed along for the routers to handle. After routing, the plates are marked in the same sequence that they were cast and are delivered to the pressroom."

Bowen remarked that advertising agencies had furnished mostly copper originals and good electrotypes, and newspapers were doing a very good job. As time passed and other papers were added to the campaigns, the agencies began looking around for less expensive ways to furnish papers with material. He said: "We received mats that we could not use in the Autoplate machines but which were stamped all over the back 'Do not flat cast'."

He concluded his address by remarking: "We do get good pre-registered mats from some of the mat makers suitable for automatic casting."

#### Real Reason for R.o.p. Color

David J. Winkworth, manager, Publisher's Bureau of New Jersey, talked about color before the Mid-Atlantic Stereotype Color Clinic. He stated that publishers do not think the addition of color is a move to compete more favorably with color tele-

vision or with color magazine advertising. It is being undertaken because advertisers are convinced that color advertising in newspapers, when intelligently used, produces better results than black and white newspaper advertising.

During the course of his address, Winkworth stated: "Several weeks ago General Electric ran a four color page in some of our newspapers. I watched one press crew clean two ink fountains, plate the press, lead in the web and register the color page in 40 min. The run was finished on schedule. Another publisher told me the same operation took his press crew 3 hrs. and 15 min. As a result, the run required 2 hrs. of overtime for the pressman, mailers and drivers. The first publisher made a profit on the ad. The second one probably regrets he ever added color equipment."

Winkworth's remarks were more or less of a general nature.

#### Education is Needed

Joseph J. Gorman, International Color Printing, Wilkes-Barre, Pa., enumerated some of the problems associated with newspaper color printing such as faulty artwork, mats made from flat casts, lack of proper register marks, shifts of the zincs in form before matting and pages not properly lined up. His suggestion was that steps should be taken to get the meat of the pamphlets which have already been published to the advertisers who have the artwork prepared, to the engravers who make the zincs, to the electrotypers and to the stereotypers as well as to the composing and pressroom departments.

#### Cox-O-Type Color Attachment

The concluding speaker on the R.o.p. Color Clinic was Frank Baker, Goss Printing Press Co., who discussed the Cox-O-Type Color Attachment which is intended for attachment to presses in the weekly and small daily field whose papers are printed by flatbed press.

## R.o.p. Color Boom Will Necessitate Equipment Buys

AT THE Mid-Atlantic Mechanical Conference held at the Ambassador Hotel in Atlantic City, N. J., March 17-19 inclusive, R.o.p. color printing seemed to enter frequently into the discussions. At the Press and Stereotyper session, r.o.p. color was the main topic for discussion. Forest Watkins, pressroom foreman, Scranton (Pa.) *Times*, presided. Co-chairman was Herbert Cox, assistant production manager, Allentown (Pa.) *Call-Chronicle Newspapers*.

#### Publisher Will Reconsider Purchase of R.o.p. Color Equipment

Co-chairman Cox discussed in his paper what color means to the stereotyper and pressman in today's newspaper. Cox spoke from the standpoint of the plant which is not equipped with latest devices for printing r.o.p. color.

During the course of his address Cox said: "Several devices for pre-registering color jobs are of great aid to the stereotyper, but unfortunately, cost so much that the profits would be taken out of color for too long a period for a publisher to consider buying these devices. However, if the newspaper



color boom continues and publishers see it as an everyday revenue getter, they will no doubt reconsider and spend more money on color equipment.

"We find many problems," continued Cox, "such as sacrificing equipment capable of printing 8 to 16 pages so that we may print a one color advertisement. Time losses for cleanup of presses cost money, additional waste of paper necessary. Preparing for color in some cases adds labor costs, and training men to cope with the situation is vital."

Cox explained that best obtainable registration in r.o.p. color printing is needed, no matter how careful the stereotyper may be, as shrinkage is still an inconsistent factor. Compensating rollers on presses must be moved quickly and often, unless electric eye equipment and automatic compensators are used. These, however, are in the same classification as pre-registering devices. They are expensive to buy but cannot be justified from a cost point unless a large volume of color can be assured.

#### Modern Equipment is a Must

J. Richard Grove, pressroom foreman, Hagerstown (Md.) *Herald-Mail*, was the next speaker. Grove stressed plant equipment modernization. He also stressed the importance of keeping equipment in good condition. He said: "It is important to have good equipment and it is likewise important to see that valuable machinery is kept in the best possible running order. There is no greater liability to a plant than allowing machinery to run down because of lack of attention. Idle machinery is costly. One of the essentials of good newspaper operation is maintenance. We all know that to meet modern conditions, newspapers must be able to produce efficiently and speedily. It is a job that requires the cooperation of all of us—management and labor."

#### That Shrinkage Problem

At this time, Harry C. Susemihl, director of printing, N. W. Ayer & Son, Philadelphia Advertising Agency, discussed stereotype mat shrinkage in relation to the advertiser.

Susemihl said: "I can readily appreciate your problems better than someone who

hasn't had practical experience in the industry. . . . From where I sit, I cannot agree with your method of using a high shrinkage mat to obtain a narrower printing web. From the advertising agency point of view, the high shrinkage mat not only distorts reproduction but affects the quality of the reproduction. From the advertising agency point of view, the high shrinkage mat not only distorts reproduction, but affects the quality of the reproduction as well."

Susemihl related that in handling automobile advertising it was found necessary to stretch the artwork  $\frac{1}{8}$  in. for each inch of the illustration. "To help compensate for distortion in printing," he said, "a client approves the stretched out proof. Because of this, it is very difficult for him to visualize that the illustration will appear in the newspaper somewhere near its right proportion.

Since all papers are not using high shrinkage mats, we are confronted with the problem of some newspapers not shrinking as much as other newspapers. So, no matter how we look at it, it is a confusing situation.

"I feel reasonably certain that the publishers who have adopted the high shrinkage mat will continue to use it. I am afraid it is here to stay. But to those who are not using it, I urge you to consider every possible means of avoiding it. I hesitate suggesting changing to a narrower column width because the papers now using the high shrinkage mat will also adopt the narrower column width and we are right back to where we started. But, in my humble opinion, the narrower column width with the normal shrinkage mat will give a better reproduction, less distortion of type, and a better relationship between the publisher, the agency and his client—the advertiser."

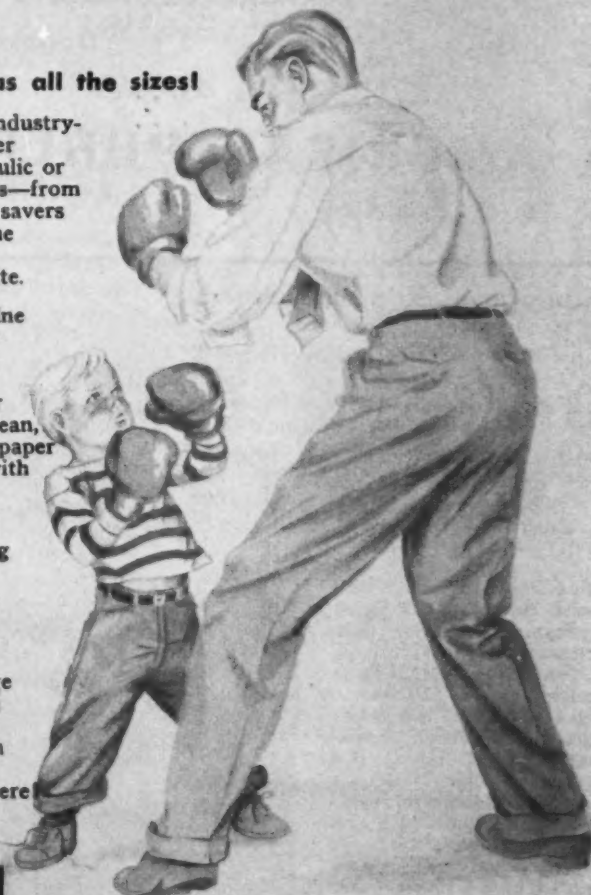
## POWER COMES IN ALL SIZES!

### And Challenge has all the sizes!

A complete line of industry-approved power paper cutters—in full hydraulic or semi hydraulic models—from the new 19 $\frac{3}{8}$ " space savers all the way up to the magnificent 37" style 370 heavy-duty favorite.

Each model in this line is a power package—ready to unleash its controlled hydraulic strength to help your operators deliver a clean, precision stack of paper—in less time and with less effort!

Add the features of 2-hand safety starting lever . . . "easily-squared" back-gage . . . "duplex" measuring tape and you have some of the reasons why Challenge—through the years—has consistently been the favorite with plant owners and operators—everywhere!



#### THE CHALLENGE MACHINERY CO.

Office, Factories and Show Room: Grand Haven, Mich.  
Over 50 Years in Service of the Graphic Arts  
DEALERS IN ALL PRINCIPAL CITIES

**Challenge**

SOLD BY

Western Newspaper Union

E. C. Palmer & Co.

Harry W. Brintnall Co.



## *A Good Place to Buy*

### STEREOTYPE, PRESSROOM OR COMPOSING ROOM SUPPLIES

- Matrix Scorchers
- Matrix Packing Tables
- Matrix Trimming Tables
- Matrix Backing Felt
- Matrix Storage Cabinet
- Curved and Flat Casting Board
- Cork Moulding Blankets
- Cork or Rubber Creepers
- Router Bits
- Stereotype Chisels
- Double Coated Tape
- Dolly Trucks (to your Specifications)

### PERFORATED PACKING FELT FOR FAIRCHILD PROCESS

Double Coated Tape

## AMERICAN PUBLISHERS SUPPLY, INC.

P. O. Box 421

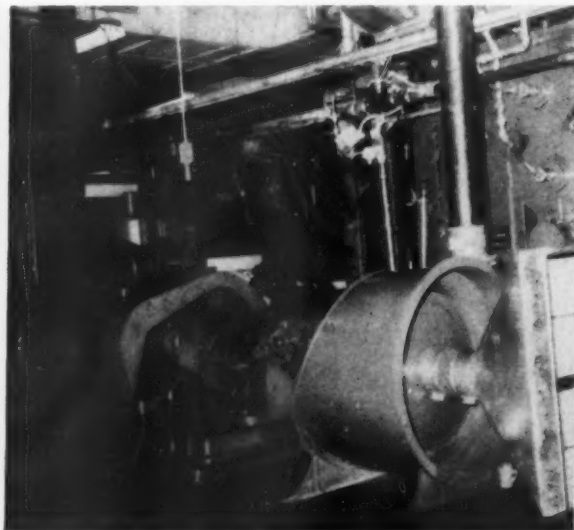
Lynnfield, Mass.

### Educational Meeting Planned

The first all Graphic Arts industry Conference on Printing Education will be held at Carnegie Institute of Technology, Pittsburgh, Pa., on Thursday, July 7. It's part of the 30th Annual Conference on Printing Education sponsored jointly by the International Graphic Arts Education Association and the Education Council of the Graphic Arts Industry, July 3-8.

### Hoe Rotary Press Fitted with Heat-Set Ink Drier

Factory men have completed installation of B. Offen & Co.'s Multi-Stage driers in the Parthenon Press plant on a Hoe rotary press in Nashville, Tenn., reports P. R. Russell. The press was converted for the use of heat-set inks on coated stock. This installation and the complete overhauling of the press cost \$65 thousand, added to the original \$95 thousand cost of the machine. In the accompanying illustration is shown mid-section of the press during drier installation. At the right is the rear drier oven and fan to be installed for expelling heat as well as pulling residual heat from the web when the press is stopped. To install the two driers, it was necessary to extend the overall length of the press from 37 ft. to 52 ft. Extra sections of the press frame, additional rollers, the extension of the drive shaft, and other equipment for the driers, including fan and roof outlet for expelling heat from the driers when the web stops, added considerably to the weight of the press. The Parthenon Press maintenance staff, headed by Phil Williams, assisted in the installation.



report will be delivered by Dr. B. Dvorak, head, Testing Division, Bureau of Employment Security, U. S. Dept of Labor. General chairman for the complete conference is Kenneth R. Burchard, assistant dean, School of Printing Management, Carnegie Institute of Technology. Burchard also is president of the Intl. Graphic Arts Education Assoc.

▶ ▶ ▶ ▶ ▶ ▶ ▶ ▶ ▶ ▶ ▶ ▶ ▶ ▶

SOLD BY

Western Newspaper Union

E. C. Palmer & Co.

Harry W. Brintnall Co.

# NEWS ITEMS

**Changes at Reliance**—Richard A. Geuder has been appointed assistant general sales manager of the Reliance Electric and Engineering Co. Edward E. Helm, sales vice president, has been assigned the added duties of coordinator of all activities in merging the efforts of the recently acquired Reeves Pulley Co. Div. with the other divisions of Reliance in Cleveland and Ashtabula, O. Reeves, at Columbus, Ind., will continue to operate as a division with Carl M. Reeves as its president. To assist at Columbus, Frank B. Carr from the Reliance home sales organization has been transferred to the Reeves division as resident coordinator.



HAMILTON

trades. He will be located in Cleveland, and cover Northern Ohio and Western Pennsylvania.

**Screen Process**—Invitations to exhibit at the Screen Process Printing Assoc. Intl. trade show are being distributed, according to Milton Grant of Cleveland, president of the association. SPPA will hold its seventh annual World Convention at the Ambassador Hotel, Atlantic City, N. J., Sept. 10-14, 1955. The lobby floor of the hotel has been set aside for exhibit booths. SPPA's forums and seminars will be held on the same floor as the exhibits.

**Kable Printing Co.** has announced the return of John Slezak, chairman of the board of directors, after two years on leave of absence while serving as assistant secretary and later as under secretary of the Army. Slezak's experience has been varied: He has been chief of the Chicago Ordnance District; president of the Turner Brass Works; president and chairman of the board of directors of Pheoll Mfg. Co. and director of Felt and Tarrant Mfg. Co.



SLEZAK

**Interchemical Reports**—Interchemical Corp.'s net profit after taxes totaled \$3,770,489 in 1954 compared with \$2,727,154 in 1953 despite a decline in sales to \$89,803,121 from \$90,827,014 over the same period. That's according to the corporation's 1954 annual report. Capital ex-

penditures of Interchemical amounted to \$2,102,527 in 1954 compared with \$1,666,560 in 1953. Of the corporation's total sales, 35% was to the packaging and container industry, 15% was for inks for newspapers, magazines and other publications, 11% was to the textile industry, 8% for commercial printing and lithography and 12% for household appliances, fabricated products, machinery and equipment.

**Visco-Mat Distributor**—Potdevin Machine Co., Teterboro, N. J., has been appointed a distributor of Visco-Mat glue preparation equipment, says Joseph S. Hawkins, sales manager, Coating Machine Division. In the Visco-Mat machine is automatically combined dry glue with water to supply a steady stream of constant-viscosity glue. This equipment will supplement the line of other gluing and coating machinery made by Potdevin.



KROON

**Peter M. Kroon** has been made a vice president of Amsterdam Continental Types and Graphic Equipment, Inc., according to Anthony van der Tuuk, managing director. Kroon has been manager of the firm's New York office since 1952.

**Safety Wins Award**—The outstanding 1954 safety record of the Des Moines (Iowa) Register and Tribune won an award from Employers Mutual Casualty Co. of Des Moines. Only six such awards have been made in

## DO THE WORK OF HOURS *in Minutes!*

### SLASH YOUR PRINTING COSTS WITH THE

# Rouse POWER MITERER

If you need miters in either small or large quantities, no other machine nor method can turn out anywhere near as many perfect joining miters so quickly from strip material. That's how the Rouse Power Miterer can slash your printing costs by doing work in minutes that now takes you hours.

**A Rouse Power Miterer won't cost you one cent!** Printers the world over say that money paid for a Rouse Power Miterer quickly comes back through tremendous savings in expensive time. After getting your money back, you'll start collecting daily dividends from permanently lower operating costs.

**FROM THE SMALLEST JOB SHOP UP TO THE LARGEST PLANT, ONLY ROUSE MAKES A POWER MITERER FOR EVERY TYPE OF USE.**

You may buy any Rouse Power Miterer as a bench model or with any other equipment you wish.

Virtually every printing plant in the world uses one or more Rouse products.

**NEW ROUSE CATALOG**

Write for your copy  
**TODAY!**

800 Miters in 45 minutes



## H. B. ROUSE & COMPANY

2214 NO. WAYNE AVE., CHICAGO 14, ILLINOIS  
ROUSE PRODUCTS — THE STANDARD OF THE WORLD FOR 50 YEARS

MITERING MACHINES  
LEAD and OULE CUTTERS  
COMPOSING STICKS  
TYPE GAGES  
SLING CLIPPERS  
BAND SAWS

the history of the insurance company. The *Register and Tribune's* record: Only eight accidents resulting in loss of time among 1,312 employees covered by insurance during 1954. Arthur Gormanley, business manager of the paper, accepted the award.

**Modern Engraving Announcements**—The election of Robert F. Nelson as president and general manager has been announced by Modern Engraving and Machine Co., Hillside, N. J. Nelson was formerly executive vice president of American Type Founders and president of Lanston Monotype Co. James O'Hear was elected executive vice president and has been with the company since 1949. Frank Broderick, elected vice president, has served as general manager since joining the firm in 1953... Nelson, as newly elected presi-

**Truck Replacement**—Latest of a number of replacements for the Heidelberg Eastern, Inc. courtesy fleet is this 1955 Chevrolet panel truck. It's touring Pennsylvania and New York state. Six Heidelberg Eastern representatives are presently engaged full time in making such pre-planned visits to Heidelberg press users.



dent, announced the formation of a wholly owned subsidiary, General Gravure Service Sales Co. General Gravure will operate from a new plant and will include modern gravure equipment; multi-color gravure printing cylinders, gravure coating and printing cylinders, register embossing cylinders and machine finished blanks. Frank

Watson, supervisor of manufacturing operations, announced that problems from customer presentation state through to cylinders proofed and ready for the press will be handled by technicians.

**Frank C. Van Schaick**, former manager of the Pacific Coast Agency, Mergenthaler Linotype Co., died April 2. He had made his home with a daughter, Mrs. Suzanne Hillis, for the past five years. Mr. Van, as he was known in his territory, was agency manager until 1935. Although he retired from active duty, Mr. Van maintained his interest and association with the agency and took pleasure in watching the progress of "his boys" whom he had trained.

**Herbick & Held President**—William G. Forster has been named president of Herbick & Held Printing Co., Pittsburgh, Pa., it was announced by Thomas P. Butler, chairman of the board. Forster joined the firm in 1953 as manager of sales and previous to that was affiliated with George H. Morrill Div., Sun Chemical Corp.; Hearst Enterprises, Inc., and Consolidated Paper Corp. He is an alumnus of the Printing Department of Carnegie Institute of Technology.

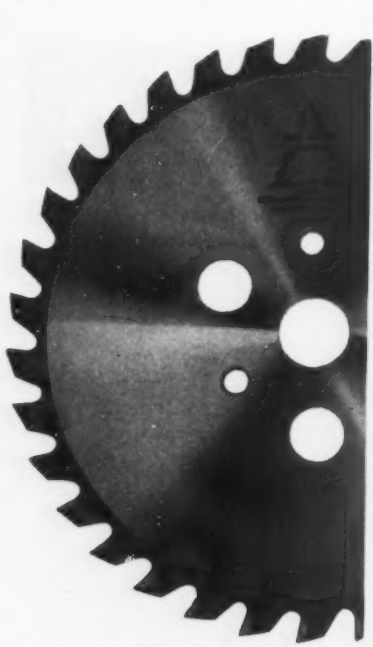
**Howard J. Rodgers** was recently appointed sales representative in the New York area for Ideal Roller & Mfg. Co., according to an announcement by Norman L. Rowe, company vice president, at Long Island City, N. Y.



RODGERS

**Two Davis, Delaney Promotions**—Promotions to vice presidencies of Fred S. Malcolm and Asher H. Aron were announced by Edward S. Davis, sr., president of Davis, Delaney, Inc., printers. Both men have been active in sales work and have specialized in the reproduction and handling of pharmaceutical printing. Malcolm has been head of the firm's Philadelphia office for the past eight years and has been associated with the Graphic Arts for more than 30 years. Aron has been active in the New York printing mart since 1934, beginning his career as a messenger boy for a New Jersey printer. Aron attended Columbia University and studied design and typography.

**Misguided Missiles**—That's the title of the Travelers Insurance Companies' 21st annual report of traffic accident data. The not-so-grand totals: 35,500 persons killed and 1,960,000 persons injured in traffic accidents during 1954 compared with 38,500 and 2,140,000 respectively during



**NORTH  
AMERICAN**  
for CARBIDE SAWS  
that stay on the  
job LONGER!

If it takes the BEST to Satisfy You  
... Buy WOODSMAN

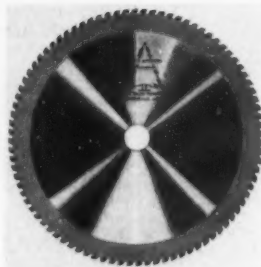
6 pt., extra quality, magni-sharp blades with the true carbide design. You'll get the most finely-fitted carbide blade made by master toolmakers. You can rely on North American's guaranteed performance.

**FOR Compositors, Stereotypers,  
Electrotypers and Engravers**

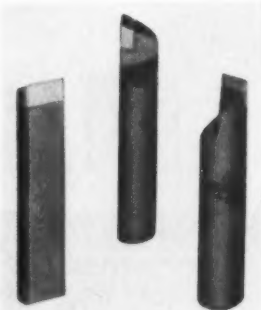
**CUTS Plastic, Zinc, Copper Halftones,  
Lead, Magnesium, Composition and  
Wood Mountings.**

Write for Details, Brochure, Demonstration

**North American Products Corp.**  
P. O. Box 201 Center Grove Road  
Edwardsville, Illinois



Immediate Delivery



Carbide Trimmers



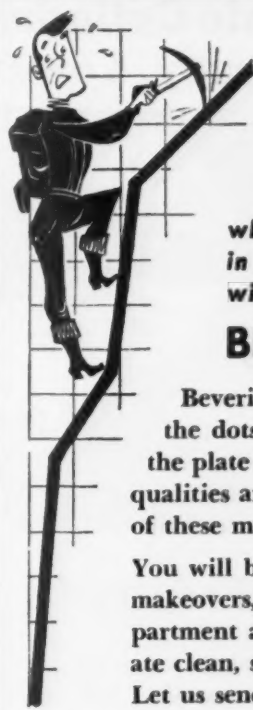
*In 1955 the*  
**JUNIOR JET 17x22 BAUMFOLDER**  
*will be YOUR "Gold-Mine"*

As it has been the past two or three years for the 2431 firms who say... "it pays for itself many times over every year."

It's the world's closest-precision... finest, fastest Folder... makes folding your most profitable operation... 5 folds in 1 operation, 60 styles of folds... makes perforating practically all profit. It's an automatic folder... automatic lightning-speed perforator; automatic scorer; automatic cutter; automatic crimper; all in one. Tomorrow's Automatic... at a pre-war price (equipped with Friction Feed \$100. initial and \$48. per month for 30 months... with Suction Pile Feed and extra motor and pump, only \$100. initial—30 month Pay-For-Itself Terms)... A "Gold-Mine" for a Life-Time. Do allow us to mail specifications. Thanks.

**RUSSELL ERNEST BAUM, INC.**

615 Chestnut Street Philadelphia (6) Pa.  
 Telephone LOmbard 3-8164



**WHY STRUGGLE  
 FOR A NEW HIGH**

**IN MAT REPRODUCTION**

when you can get the **BEST**  
 in **Stereotype Performance**  
 with

**BEVERIDGE MATS**

Beveridge's smooth face picks up the dots with ease. Clean release of the plate in casting and deep molding qualities are other noteworthy features of these mats.

You will be happy with the minimum makeovers, while your advertising department and advertisers will appreciate clean, sharp faithful reproductions. Let us send you an order—write today.

NEW PRODUCTS DIVISION

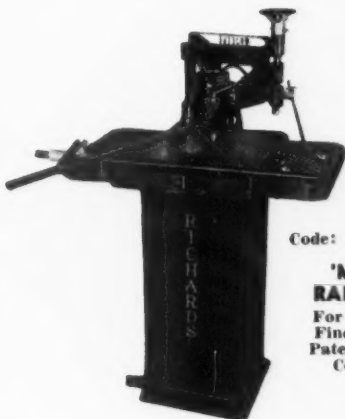
**BEVERIDGE PAPER CO.**

Indianapolis 4, Indiana



**SPEED PRODUCTION with  
 RICHARDS' PRECISION  
 SAWS • ROUTERS • MORTISERS**

For further information on these  
 and other  
**RICHARDS EQUIPMENT,**  
 Saws — Routers — Mortisers,  
 please write



Code: PMRS

**'MULTIFORM'  
 RADIAL ROUTER**

For Straightline and  
 Fine Detail Routing  
 Patented Straightline  
 Control Feature



**'ELECTROMATIC'  
 SAW TRIMMER**

For Stereotypers,  
 Electrotypers,  
 Photoengravers  
 Code: EST-27x38 Table  
 ESST-32x42 Table



**NEW MODEL**

Code: M2-B

**ENCLOSED CURVED PLATE ROUTER**

with new close coupled single belt drive  
 Ball bearing construction throughout  
 Price \$1875.00 complete

**J. A.  
 RICHARDS COMPANY**

903 N. PITCHER STREET • KALAMAZOO, MICHIGAN

## New Rubber Plate Cylinder Combines Precision Accuracy, Lower Cost



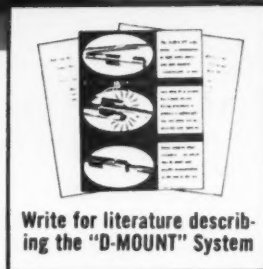
Unique "D-MOUNT" system enables you to "integralize" light alloy sleeve and steel mandrel in minutes... disassemble just as fast.

### MOSSTYPE "D-MOUNT" CYLINDER

Now you can keep more jobs standing... carry a wider range of repeats. This new type of rubber plate cylinder assembly costs far less, but has the precision accuracy and concentricity of finest shafted rolls. Lightweight... easy to handle and store. Assembled and disassembled in minutes. "D-MOUNTS" are available as bare cylinders... or as all-over Design Rollers.

Pat. Pend.

**MOSSTYPE** / 33 Flatbush Avenue  
Brooklyn 17, N. Y.  
Branch Plant: Waldwick, N. J.



Write for literature describing the "D-MOUNT" System



**GREATER ADHESIVE POWER  
with  
BOOTH ZINK CUT CEMENT!**

*\*PROVED by years of constant use in leading composing rooms and stereotype departments.*

**LOW PRICE of:**  
\$1.00 per tube • \$7.50 per dozen  
F. O. B. Cleveland, Ohio

**E. A. BOOTH RUBBER CO.**  
2855 Scarboro Road  
Cleveland Heights 18, Ohio  
Phone: FAirmount 1-2384

## PRESSROOM Time Savers

**IMPROVED "CAPCO" PORTABLE INK FOUNTAIN**... Provides color efficiently, in a matter of minutes. Tried, proved and guaranteed. Over 500 in use in over 200 newspapers. Weight—approx. 30 lbs.

**"CAPCO" FACE-O-TYPE**... A machine that mechanically reproduces an engraved type screen pattern! Cuts page costs and speeds production.

**"CAPCO" PLATE GAUGE**... New lightweight gauge is designed for checking the thickness of Standard stereotype plates, tubular and flat plates. Easier to use—greater savings.

**"CAPCO" MULTI-CORE STRIPPER**... A machine ENGINEERED to strip cores. Increases production as much as 400%. Many savings—will pay for itself out of savings.

**"CAPCO" REWINDER**... the EFFICIENT, ECONOMICAL means of unwinding or rewinding paper. Has a splicing car which trims and overlaps top and bottom sheets to be fastened in one operation with adhesive tape.

Write Today for Complete Details

**CAPITAL TOOL AND  
MANUFACTURING CO.**  
5000 Calvert Road UNION 4-7677  
COLLEGE PARK, MARYLAND

1953. Excessive speed was the most common fatal mistake of drivers, resulting in 12,380 deaths. Three out of four 1954 auto accidents happened to passenger cars driven in clear weather on dry roads. Saturday was the most dangerous day of the week to drive. One ray of hope that drivers may someday learn to control their wonderfully-engineered automobiles: 1954 was the first year since 1949 in which there was a decrease in the death toll.

**New Executive**—Electro-Matic Engraving Co. recently became a division of Jahn & Ollier Engraving Co., Chicago. Don Sutte, Electro-Matic vice president, was named a vice president of both operations.

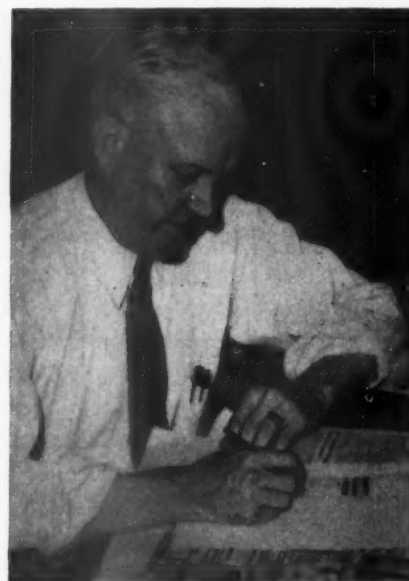


SUTTE

**Intertype Report**—The 1954 annual report of Intertype Corporation shows a drop in sales to \$11,497,283 in 1954 from \$12,240,155 in 1953. Net income after taxes rose, however, to \$994,433 in 1954 compared with \$875,655 in 1953. Among details in the report is that gross revenues from Fotosetter photographic typesetting machine increased more than 26% to \$530,462 in 1954.

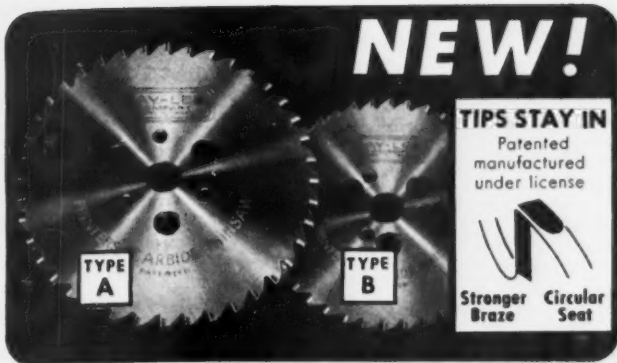
**Notify of Address Change**—When you change positions and/or also have an address change, please notify *Printing Equipment Engineer*. By doing so, you will not miss receiving copies.

**Design Seminars Offered**—Four seminars on newspaper design are currently being sponsored by Mergenthaler Linotype Co. Gilbert P. Farrar, newspaper stylist, is



conducting the meetings in which all phases of newspaper make-up are studied. Schedule for the remaining seminars is: New York, May 9-13; San Francisco, June 6-10; and New Orleans, Oct. 24-28.

**Celebrates 25 Years**—Typographic Service, Inc., Philadelphia typographers, called attention to its 25th birthday by sending to friends and customers a bottle of champagne in a champagne bucket. Said the company: We opened shop on a shoe-



## CARBIDE PRINTERS SAW

CUTS NEW ALLOYS INCLUDING DOWMETAL  
CUTS STEREOTYPE, BASE, SLUGS, ETC.

A carbide saw that really works. Cleaner cuts, freedom from burrs, excellent back rake cutting, no scream, no chip throwing. Trimmer blades not being used with those now in service and apparently can be eliminated. Sharpening service available. Many large shops are now converting to this saw. 30 day free trial.

**SENSIBLY PRICED. SPECIFY TYPE A (7") or B (6") \$39.50**  
ON DISPLAY—A.N.P.A.—CHICAGO—JUNE 6-8

**"THINSAW"** with Carbide Tips

Built only by... **GAY-LEE COMPANY**  
CLAWSON • MICHIGAN

string... and became one of the nation's largest typographers by pursuing a policy of "You can't do too much for the customer." Typo and its affiliated companies, Rapid Reproduction Service and Typo Photo Copy, comprise an organization of 300 people.

### Houston Tradetypers' Appointment

Walter C. Bohland is appointed general sales manager for Houston Tradetypers, Inc., announces Wallace Van Houten, company president. Bohland has been in the Graphic Arts industry in Minneapolis and St. Paul, Minn., for 10 years. He had previously represented Harrison and Smith Co. in Minneapolis and earlier had been in charge of production for the advertising department of Minnesota Mining and Mfg. Co.



BOHLAND

**Foreman's Management School**—Thirteen men attended advanced Foreman's Management training conducted by Printing Industries Assoc., Los Angeles, from March 30 to May 6, twice a week for a total of 22 hours. The instructor was Andy Forbis of PIA. Those taking instruction were: Ken Garrison Clarke, Kerr Printing; Robert Johnston, jr., Service Lithoprint; Vincent P. Bingham, Best Printing Co.; Richard J. Wurtz, Joe Daley & Sons, Inc.; Ernest A. Szabo, Ace Offset Printing

Co., Inc.; Albert F. Holz, Ace Offset Printing Co., Inc.; Leo Heydorff, Bert-Co Press; Clay Adkins, P-B Press, Inc.; Willard O. Preston, P-B Press, Inc.; James Shippam, Hillside Press; Robert L. Couturier, Bert-Co Press; Harold Thomas Haston, P-B Press, Inc.; George Riggie, P-B Press, Inc.

**Frank Dye**, veteran stereotype department foreman for the Ft. Worth (Tex.) *Star-Telegram*, retired April 1. Dye worked almost 43 years with the paper, was the oldest foreman in point of service, and was the first to retire at the *Star-Telegram*. He intends to travel, following the trotting horse circuit.

"You said give the new man anything he wanted."

"We both admit we are GOOD,"



remarks the Engraving Foreman to the space man, after the Shopping Center's big section went across so well. "Yes," he adds, "and Bob is a wonderful pressman. But would we be getting all this applause if the stereo department hadn't made that change to Certified Mats?"

For dependable stereotyping, rely on Certified Mats

**Certified DRY MATS**

CERTIFIED DRY MAT CORPORATION, 9 Rockefeller Plaza, Dept. M, New York 20, N. Y.

**Courses Offered**—Two courses in color separation for commercial artists and practicing graphic artisans will be offered this coming fall semester at New York City Community College, Brooklyn, N. Y. Both courses will be given by Mrs. Jean Bourges Mayfield in the evening division. Line reproduction will be given in the fall semester; halftone reproduction will be offered in the spring semester. Persons desiring to be considered for these courses should submit a resume and samples of work to George M. Halpern, Coordinator, Advertising Production Management, New York City Community College, 12 Franklin Ave., Brooklyn 11, N. Y.





Investigate . . .

## The NOLAN STEREOSAW



Check these features: Extra large table 28x36" . . . Powerful 2 HP motor . . . Double V-belt drive . . . Heavy base, no vibration . . . Straight edge and side gauge . . . positive elevating mechanism . . . 10" dia. saw blade . . . Rugged ball bearing saw mount . . . Four-wheel chip buggy. Write for prices.

**NOLAN CORP.**  
ROME, NEW YORK  
Builders of Quality Printing Machinery

## Carnegie Tech's

### Summer Courses

All phases of printing will be studied in six week summer school courses at Carnegie Institute of Technology from June 27 to August 6, as announced by Kenneth R. Burchard, assistant dean of the School of Printing Management, who is in charge of the summer session. He also stated that students will be able to attend 16 technical sessions which will take place on the campus this year as part of the joint National Conference of Graphic Arts Educational Assoc. and the Educational Council of Graphic Arts Industry. Courses will carry college credit and enable teachers of printing, employees of commercial printing plants, and others interested in the Graphic Arts to refresh their knowledge and acquire new skills and techniques. Individual courses in planning, design, estimating, cost accounting, and management will be offered, as well as skill-development courses in typography, presswork and photo-lithography. Applicants will be accepted on the basis of previous education, training or printing experience. Advanced applications may be filed with the Director of Summer Sessions, Carnegie Institute of Technology, Pittsburgh 13, Pa.

**FLAT-WRAP**  
**FOLD-WRAP**  
**BAND-WRAP**

**26**  
TIMES FASTER  
than  
HAND-WRAPPING

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the **MODERN WAY!**

The **RIGHT** machine to wrap your magazines tighter, faster and more economically is made by **MAGNACRAFT**.

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**way**  
**down yonder**  
**in New Orleans**

**Printing House**  
**Craftsmen**  
**7th District**  
**Conference**  
**June 10-11, 1955**

## Battelle Booklet

Bringing the benefits of competent research to firms with limited funds and space for such purposes is the object of Battelle Memorial Institute's plan for contract research. Battelle's method is described in the booklet, *Battelle Research—How It Can Help You Solve Technical Problems*. In simplified terms, the plan is that the sponsoring firm enters into a contract with Battelle for a clearly defined program of research. The maximum amount of money to be spent within a prescribed time is specified in the contract. The sponsor gets exclusive ownership of all information and inventions coming from the Institute's work on his project. The Institute has done some research for the Graphic Arts industry in photoengraving, electrotypes, rotogravure and bookbinding. Companies which Battelle has served include Bergstrom Paper Co.; Champion Paper and Fibre Co.; International Paper Co.; Mergenthaler Linotype Co.; Minnesota Mining and Mfg. Co.; Time, Inc., and Union Bag and Paper Corp.

## COMP'S PRAYER

O Lord, please convey to the minds of the layout artists that the type us poor mortals use is made of metal, not rubber, and that it will not contract, expand, bend or run round corners. Amen.

This Comp's Prayer was published in the December issue of *The Rotoprint Journal*, house organ of The Rhodesian Printing and Pub. Co., Ltd., Beatrice Road, Salisbury, Southern Rhodesia, Africa. The copy of the December issue was sent to *Printing Equipment Engineer* by Norman Fletcher. Fletcher is in charge of stereotyping. Fletcher is somewhat of a globe trotter. In *The Rhodesian*, however, comment is made that it now looks as though Fletcher has settled down, having been with the company some six years. His extra curricular activities consist of Boy Scout work, Toc H and the Methodist church.

## Voluminous Production Under High Pressure

**P**UBLICATION by the Chicago *Tribune* of the 200,000 word text of the Yalta conference on the morning of March 17 within less than 12 hours after copies were obtained in Washington, D. C., was heralded as an outstanding achievement in journalism, printing, public service and education. Only two newspapers, the *Tribune* and the New York (N. Y.) *Times*, published the text on March 17. Split second co-operation throughout the *Tribune* organization made publication of the 32 page special section in Chicago possible.

Lawrence Burd, of the Tribune Press Service Washington staff, received two copies of the 834 page Yalta report from

**West Coast Installation**  
—A 21 in. by 28 in. Original Heidelberg Cylinder Press was recently installed at James J. Gillick Co., West Coast printing plant in Berkeley, Calif. Pictured looking over their new press are: (left to right) Sidney Higgins and Arthur Hargrave, owners, and Charles Gregory, pressroom foreman.



## WIDE RANGE DIMENSIONS

Hess & Barker's Multi-Color Web Fed Letterpress is the only standard press that provides a wide range of dimensions both in width and length. If you need only a two color press today and next year you want to add additional colors, all you need do is buy the parts. The press frame is machined ready to accommodate up to four colors. No additional floor or ceiling space is required. No taking the frame apart. Parts can be installed from quitting time Friday to starting time Monday. Maintenance and production costs are very low. Which explains why 75% of our customers own and operate two or more Hess & Barker presses. Speeds 750 feet per minute or 10,000 sheets an hour. Write for additional information today.



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Our newer customers confirm the opinion of our older customers that reproduction of both type and halftones is improved by changing to Wood Dry Mats.

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CORPORATION**  
HOOSICK FALLS, N. Y.



ALWAYS UNIFORM

New York City Office

551 FIFTH AVENUE, NEW YORK 17, N. Y.

the state department at 4:00 p.m., March 16 and boarded a plane for Chicago at 4:30 p.m. He was met at 7:35 p.m. at Chicago Midway airport and rushed to Tribune Tower.

While Burd was enroute from Washington, *Tribune* editorial and production executives had determined that they would attempt reproduction of the text by the photoengraving process in the final editions of the March 17 *Tribune*. The first edition already was on the presses. Pages were tentatively laid out; headlines and datelines for the section were set into type and proofed on enameled stock. Engravers on expiring shifts remained at their posts.

When Burd reached the *Tribune* newsroom, members of the art department, copy readers, and mechanical superin-

tendents promptly set to work ripping pages from the report and pasting them on sheets of cardboard 18 in. by 27 in. in size. The pasted sheets then were photographed and reduced to 14½ in. by 22½ in. for engraving as pages. There were 30 of the engraved pages.

Fifty-nine engravers worked on the project in the black and white engraving department, color engraving, the experimental laboratory, and the jem metal department. During part of the time nine etching machines were in use. The first pasted-up page reached the engraving department at 8:43 p.m., the last one at 11:58 p.m. The final plate was completed at 2:42 a.m. and by 3:00 a.m. *Tribunes* containing the complete section were going out to newsstands.

For printing the special section of 32

pages, a total of 320 stereotype plates were cast. These were used on five large presses operated in conjunction with 15 other presses that were printing the 96 pages that made up the other sections of the regular daily paper. For the regular Thursday newspaper more than 1920 stereotype plates were cast, so, including the special section, more than 2240 stereotype pages were cast. Altogether, 132 art department members and mechanical superintendents and employees had a hand in getting out the special section in addition to editorial department employees who worked on the project.

Prof. William S. Gray, director of research in reading at the University of Chicago, estimated that it would take the average reader 13 hrs. or more to read every word of the published text.

## WEB BREAKS?

THE WEB BREAK DETECTOR SYSTEM  
DESIGNED FOR HIGH SPEED PRESSES

COMPLETE PRESS PROTECTION  
AGAINST WEB BREAKS

Specify the **COOKSEY SYSTEM**

for information write to:

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Sales Agents: The Goss Printing Press Co., Chicago  
R. Hoe & Co., New York  
Wood Newspaper Machinery Co., New York

For the Stereotyper . . .

### DIRECT PRESSURE MATERIALS

Nylon, Molleton Drying Blankets,  
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White Paper and "Economy White"  
Drying Paper.

Samples and Prices on Request

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1651 Blue Island Avenue Chicago 8, Ill.



**POSITIVE METAL DELIVERY  
—SAFELY!**

with

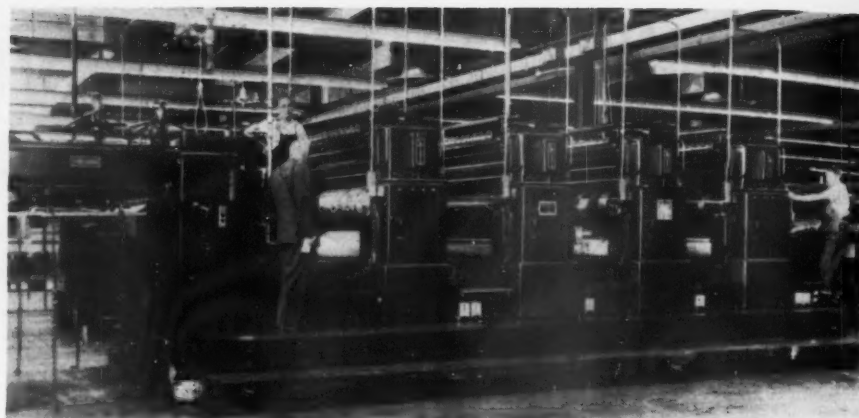
*Automatic Metal Pump*

Particulars  
furnished on  
request

And with positive delivery you get dross-free castings with metal drawn from base of the metal pot. Another reason why hundreds of these pumps are in use.



**INTERNATIONAL NEWSPAPER  
SUPPLY CORPORATION**  
134 N. LaSalle St. Chicago 2, Illinois



**Miehle Press in Sacramento**—Pictured above is the latest addition to the State Printing Division in Sacramento, Calif., a new Miehle No. 76 Four Color Sheet-fed Rotary Press. There has been little change for a number of years in this plant, but the recent acquisition of several modern presses has greatly increased pressroom production.

**Minimum Words  
Used To Tell All  
In PIA Booklet**

**B**REVITY, irrespective of the subject under discussion, is always desirable. For this reason, we want to call to the attention of our readers the compact and intelligent explanation of the many services available to prospective printing plant members of the Printing Industry of America. The information is contained within a promotional booklet entitled *Memorandum About PIA*, published by the Printing Industry of America, Inc., 719 15th St., N.W., Washington 5, D. C.

All of us are aware that most everybody is a busy person. Many people wax enthusiastic and become voluble, especially when handling a subject that seems to defy description in brief form. Therefore, let's provide the message in as brief form as possible so that "he who runs may read as he runs."

In the booklet are explained PIA Services to plant management members. These consist of helping with major management problems throughout the country.

We want to remark upon the mechanics of the booklet which make for read-

ability. It's set in fat roman face, 18 pica wide lines, with ragged right edge. There's about 6 in. depth to the type matter on each page.

Explained briefly, the services are as follows: (1) Industrial Relations for union and open shop employers, afforded to members through specialized sections. (2) PIA Government Relations with respect to the printing industry in general from a national standpoint. (3) Professional conferences for each field of management including Foremen's Management Program and the annual convention. (4) Publications include PIA Production Par, Ratio Studies, Management of Printing Production, Composition Manual, Estimating Manual, Course in Selling Printing, Accounting and Cost Finding, Simplified Cost System. (5) Besides the Union and Open Shop Advisory Sections, there are two other sections—Web Offset and Trade Binders.

Printing Industry of America consists of 5000 members affiliated through 55 local, regional and national associations, together with some 300 members at large. Annual PIA expenditures are approx. \$450 thousand.

A copy of the booklet may be obtained by addressing James R. Brackett, General Mgr., Printing Industry of America, Inc., 719 15th St., N.W., Washington 5, D. C.

**TEMPO  
BLACK  
EXTENDED**

Here's a new member of the popular Ludlow Tempo family, in line with the current trend for "extended" display. Note its force in this small ad. Available in 18, 24, 36 and 48 point caps.

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TYPOGRAPH COMPANY**

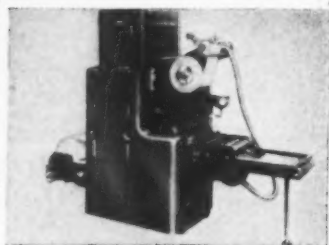
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for new, faster methods  
of printing, investigate

*Speedflex*

**ROTARY PRESSES SPEED PROFITS!**



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ZONE \_\_\_\_\_

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Designed and sold exclusively by Orville Dutro & Son. Made by Western Gear, manufacturers of gears and special machinery for industry since 1888.



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BUILT TO YOUR  
SPECIFICATIONS**

by  
**GEORGE  
HANTSCHO**

Over 25 years' experience  
designing & building presses

Among presses  
delivered recently:

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**GRAPHIC ARTS  
MACHINERY, INC.**

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\$ .75 per line 1 1/8" wide. Minimum ad 5 lines, 29 characters per line. Cash with order.

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We will forward all mail addressed to Box Numbers. When answering Box Numbered ads, address as follows: Box Number . . . PRINTING EQUIPMENT Engineer, 1276 West 3rd Street, Cleveland 13, Ohio.

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Famous since 1936, hundreds of users testify to the effectiveness of STAR CUT CEMENT. Do a better job of mounting photoengravings, stereotypes and electrotypes by using STAR CUT CEMENT. Composing, stereotype, electrotypes and photoengraving executives must see that the mounting job is done right. They know the value of a cement that permits mounting cuts quickly and holds them in place. Be sure to use the PROVED cement—STAR CUT CEMENT.

65c per tube—\$5.50 per doz. \$5.00 per doz. in 2 doz. lots. \$4.50 per doz. in gross lots.

### STAR CEMENT COMPANY

45 Malone Avenue  
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### HELP WANTED

Four situations — floor and machine. Day shift \$98.00, 37 1/2 hours. Holidays, hospitalization, surgical insurance, pension. Contact James R. Rickard, Supt., Commercial-News, Danville, Ill., a Gannet Newspaper.

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Qualified to operate 5-color Inta-Roto 34" press equipped with slitter rewind and register sheeter. Permanent, top wages, excellent employee benefits in larger Rochester, N. Y. printing plant of company leader in field and growing. Write, giving full details of background and experience.

Box No. 529 PRINTING EQUIPMENT Engineer

### FOR SALE

Ludlow Machines & Mats. Model C Intertype & mats. Write for new Catalog—Foster Mfg. Co., 210 N. Broad St., Phila., Pa.

### FOR SALE

MULTIFACE PERFORATOR—Practically new with 8 pt. Opticon and 5 pt. Regal magazine. \$1,600. Reply Box 527—PRINTING EQUIPMENT Engineer.

### FOR SALE

Ludlow, Lino & Intertype Mats. 10 day free trial. Save up to 60%. Other new & used equipment. Write for new Catalog. Foster Mfg. Co., 210 N. Broad, Phila., Pa.

### HELP WANTED SLITTER DESIGN ENGINEER

Splendid opportunity with well established machine builder for designer with thorough understanding principles of slitter operation plus actual design experience in 40" to 150" range. Please give complete details plus salary desired in first letter. All replies treated confidentially. Our employees know of this "ad". Box 530.

For good used  
equipment check



Webendorfer, MAC, 17 x 22", as is . \$3,500  
Harris 128 (LTC), 21 x 28", as is . . . 6,500  
Harris LSK, 42 x 58", as is . . . . . 35,000  
Harris 245 (LST), 35 x 45", as is . . . 45,000  
Harris EL, 22 x 34", swing-feed, as is. . 5,500

Box No. 1, Printing Equipment Engineer

## CHAS. T. MAIN, INC.

Consulting Engineers Since 1893

ECONOMIC STUDIES, PROCESS STUDIES, DESIGN, SPECIFICATIONS  
PROCUREMENT AND SUPERVISION OF CONSTRUCTION

FOR

### NEWSPAPER AND PRINTING PLANTS

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### SYNTHETIC and COMPOSITION ROLLERS

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BRANCH: 225 N. New Jersey St., Indianapolis 4, Ind.

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CLEAN SPACEBANDS THE *Auto* WAY  
30 SECONDS PER SET including under the sleeve  
Protects BANDS, MATRIX and eliminates grime

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Advertise your plant's surplus equipment in *Printing  
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SMOOTH • DEPENDABLE • ACCURATE

VARIABLE SPEED CONTROLS

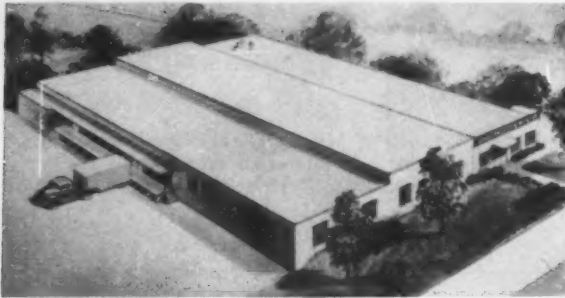
for  
ROTARY PRESSES

Get the RIGHT Control to meet your needs! Very small space requirements. There's an exact type to give you the most for your money.

Write for complete details

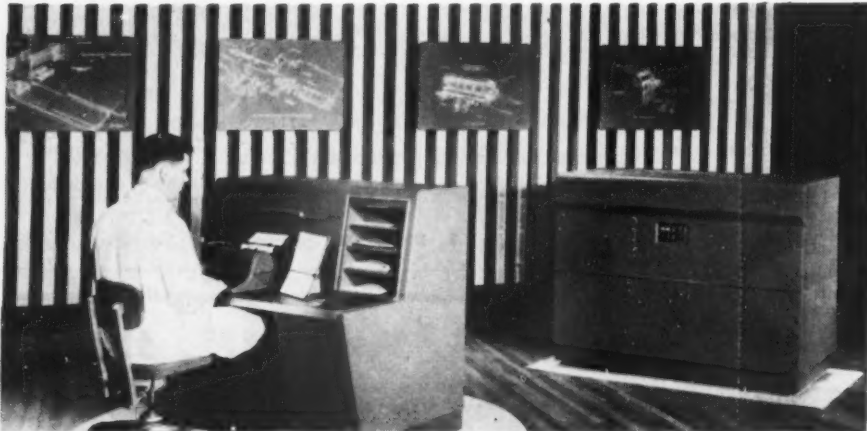


**Pantone** ENGINEERING & MFG. CO.  
5541 WEST MONROE STREET • CHICAGO 44, ILL.



**Modern Plant Announced by Ideal**—Construction of Ideal Roller and Mfg. Co.'s new suburban Atlanta, Ga., factory is now in process according to an announcement by H. N. Love, president of Ideal. The plant will be furnished with grinding and polishing machinery for processing printing and mechanical rollers, and in addition, will house automatic wrapping

machines and equipment for furnishing compounds of materials in the southeastern area. The building of Ideal's fourth plant was prompted by increasing business in the southeastern area. The factory is located on Peachtree Industrial Blvd., Atlanta, Ga., and it is planned that the plant will be open to visitors the latter part of August.



**Going Overseas**—Mergenthaler Linotype Co. says its Hydraquadder and a pre-production model Linofilm machine will be shown for the first time outside the U. S. at the International Printing & Allied Trades' Exhibition, London, in July. In operating the Linofilm, a phototypesetting machine shown above, the operator at the keyboard (left) perforates tape that automatically controls the photographic unit (right). The Hydraquadder, installed on a Linotype machine, enables the operator to cast lines of quadded or centered types without keyboarding and counting quads.

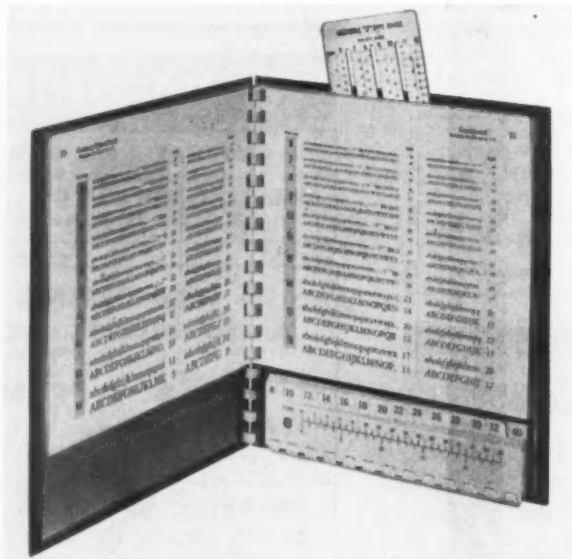
**Copy-fitting Tool Provides Quick Answers**—M. A. Haber, president of The Haberule Co., has devoted a lot of time and energy in improving the *Haberule Visual Copy-Caster*, which is now in its sixth edition. For those who are not familiar with the instrument, it may be said that over 800 type faces in all sizes from 4 pt. to 18 pt. are grouped according to manufacturers for quick reference. The type suppliers listed are American Type Founders, Bauer, Continental, European, Intertype, Linotype, Ludlow and Monotype.

In the visual character count for type faces, there are 53 precision scales with pica units which enable the user to see instantly the character count of over 4000 fonts.

By means of a yellow plastic type gauge, scales ranging from 5½ pt. to 12 pt. can be used to measure the depth of a block of type without computation. Elite and pica typewriter character count and a 6 in. rule appear on the reverse side of the plastic type gauge. There are 29 type specimens in caps and lower case of the most popular type faces keyed for instant character count reference.

It might be remarked in passing that Haber has taken all of the mathematics out of type computation and copy fitting so the user can expend his mental energies upon other work.

The *Visual Copy-Caster* is printed in two colors on durable stock. Long wear covers are bound with plastic binding. Size, 7¾ in. by 8¾ in. Price \$7.50. Order direct from The Haberule Co., Wilton, Conn.



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MAY 1955

### P. E. E. REPRESENTATIVE

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MELBURN O. SIMMONS, Mid-West Advertising Representative, 333 North Michigan Ave., Chicago 11, Ill. Phone DEarborn 2-6467.

GEORGE GELL, Central District Advertising Representative, 1276 West Third St., Cleveland 13, Ohio. Phone PRospect 1-0098.

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# Hammond Radial Router

A GOOD RADIAL ROUTER AT A REASONABLE PRICE



"GOOD FEEL"  
FULL POWER  
FULL-PAGE CAPACITY

THE HAMMOND Radial Router has what it takes to give you good routing performance . . . the good feel and sensitivity the operator needs . . . full power and constant routing speeds . . . full-page capacity and rugged construction. It is the ideal machine for the larger weekly or smaller daily newspaper plant or as an "over-flow" machine in the stereotyping room of the larger daily plant.

Model R-4 - write for complete  
information - no obligation

*Hammond Machinery Builders*  
INC.

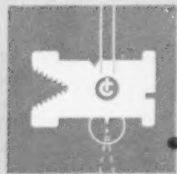
1604 DOUGLAS AVENUE

KALAMAZOO, MICHIGAN



Do you know that  
these 9 type faces  
are available  
only on the  
**INTERTYPE**  
**Fotosetter**  
?

*If it isn't made  
by Intertype,  
it isn't a Fotosetter*



**Intertype**  
CORPORATION

360 Furman Street, Brooklyn 1, N. Y. Chicago,  
San Francisco, Los Angeles, New Orleans, Boston  
In Canada: Toronto Type Foundry Co. Ltd. Toronto,  
Montreal, Winnipeg, Vancouver, Halifax

*Fotosetter is a registered trademark  
Text: Fotosetter Century Schoolbook*

Antique Roman  
BANKERS ROMAN  
ENGRAVERS GOTHIC

These three Fotosetter faces originated from designs made by engravers especially for the exacting requirements of their art. These types, exposed sharp and clean on film, reproduce the finest hairlines and serifs with fidelity, and provide the basis for crisp, clean letter images on the plate. Letterheads, calling cards, statements, and all types of printing for the professions gain added prestige from the use of these faces.

*Lucia Script*  
*Embassy Script*  
*Nuptial Script*  
*Stuyvesant Script*

A fine group of delicate script designs for distinctive social announcements in the best tradition. These faces reproduce with equal clarity and sharpness by all printing methods, whether from line engravings, offset plates or intaglio engravings. These scripts are equally useful in heads for financial reports, announcements, occasional display lines, signatures, etc. The wide range of sizes possible by enlargement offers the typesetter extra utility in the use of these faces.

*Catalina*

This eye-catching design provides great flexibility and interest in contemporary advertising. It is equally effective for the spot word, title or secondary head which the designer wishes to emphasize. The imaginative layout man will achieve excellent effects with this face in display for stationery, book pages, covers, broadsides, folders and advertising pieces of all kinds. A unique feature of Catalina is that it can be justified ten per cent of the line length and still maintain the joining feature.

*Old English*

This version of the black letter of medieval times still finds use today in ecclesiastical, educational and historical printing. It conveys the feeling of age, tradition and time-honored precedents in keeping with archaic subjects. Old English is particularly appropriate in church documents, diplomas and certificates.